

Ethnographical Studies in Celebes

RESULTS OF THE AUTHOR'S EXPEDITION
TO CELEBES 1917—20

V

MEGALITHIC FINDS
IN
CENTRAL CELEBES



With 15 Maps and 77 Figures

by

Walter Kaudern

THE HAGUE
MARTINUS NIJHOFF

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PRINTED IN SWEDEN



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To
The Honorable
Consul Gunnar Carlsson
Gothenburg

With the author's gratitude and esteem

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PREFACE

This work I have arranged as Volume V in the series which treats of the ethnological results of my researches on Celebes during the period 1917—1920. The reason that so many years have gone by since Volume IV was published is mainly that my activities at the Gothenburg Museum have claimed all my time. But there have also been economic factors which have lain in the way.

I have taken the liberty of inscribing this volume of my Series to the honourable Consul Gunnar Carlsson, Director of the Swedish Transatlantic Line, as a small token of my gratitude for the interest he has shown my work by granting free passages for me and the members of my expedition, as well as free freights to and from Java.

I wish to extend hearty thanks to Dr. K. O. Bonnier, of the Publishing Firm Albert Bonnier, Stockholm, who has placed at my disposal a number of plates which were published in my work "I Celebes Obygder" in 1921. Likewise I want to thank most warmly Professor Dr. J. G. Andersson, Director of the Museum of Far Eastern Antiquities of Stockholm, who has stood for the costs of preparing and mounting the large clay vessel which I brought home in small pieces from the province of Bada, and also for the photograph he has taken of this clay vessel for reproduction here.

Furthermore, I wish to thank most sincerely my wife, who has carried out the translating into English of my Swedish manuscript and has read the proofs, etc.

Finally I want to extend heartiest thanks to Mrs. Mary Frodi, who has been so kind as to correct the English text.

In regard to the geographical names I have in this work, as well as in the foregoing parts of my series, used the Dutch spelling. Thus *oe* represents the same sound as the German *u* or the French *ou* and does not indicate any diphthong. Nor does *ae* represent a diphthong or an *ä*-sound, but is pronounced as if it were a French *a* and a French *é*.

All the drawings have been made by the author unless it is otherwise indicated. The same is true of the maps. Maps 3, 4 and 11, as well as certain details on number 9 and 10, I have sketched with the help of a compass and pacing, and as basic maps I have used Alb. C. KRUYT's "Schetskaart van Midden-Celebes, Schaal 1: 200 000, 1916," and "Schetskaart van een deel van Noord- en Midden-Celebes, Schaal 1: 500 000," the latter published by the Topographical Service, Batavia 1919.

Göteborg, July 1938.

Walter Kaudern.

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INTRODUCTION

For about three decades megalithic objects are known from Central Celebes in the Dutch East Indies, but as yet no comprehensive work on the subject has been published. Some of the papers treating of the ancient stone objects met with in Celebes being rather difficult to get at, I have in this paper made an attempt to bring together all the data supplied by earlier workers as well as those I acquired myself during a sojourn of four years in Celebes, from 1917 to 1920.

As early as in 1921 I published in my book on my travels in Celebes, "I Celebes Obygder," an account of the ancient stone monuments I saw in Central Celebes, but this book, because of its being written in Swedish, is not much known beyond my own country. Mr. RAVEN, for instance, an American who for zoological purposes stayed for about a year in Celebes (1917), in a paper of 1926, "The Stone Images and Vats of Central Celebes," does not know of my account on the same subject. Doctor ALBERT C. KRUYT, the Dutch missionary who worked for more than thirty years in Celebes, in a paper of 1932, "L'Immigration Préhistorique dans les Pays des Toradjas Occidentaux," quotes my Swedish book in some cases, in others he makes use of my theories without mentioning that they are not his own but borrowed from me.

My study of the ancient stone monuments of Central Celebes was but a preliminary survey meant to be the basis of a projected research pursued in accordance with scientific archaeological methods. Such strict investigations do not seem as yet to have been carried out in a single place in all Central Celebes. For several reasons I have not yet been able to prosecute my scheme, but I still hope to do so.

In the hill districts, especially of the northwestern and central parts of Central Celebes, a great number of stones worked by man are found, dating from a cultural period previous to the present one. The natives of our days do not know the art of forming stone into images, or simpler objects used for practical purposes with the exception of the small grooved stones forming part of the mallets used to pound bast cloth. Nowhere are they able to supply any reliable particulars about the origin of the stone objects or for what purposes they are meant. At places tales have grown up regarding the stone images, but as far as I can see they do not help to solve the question of their origin.

DESCRIPTIVE SECTION

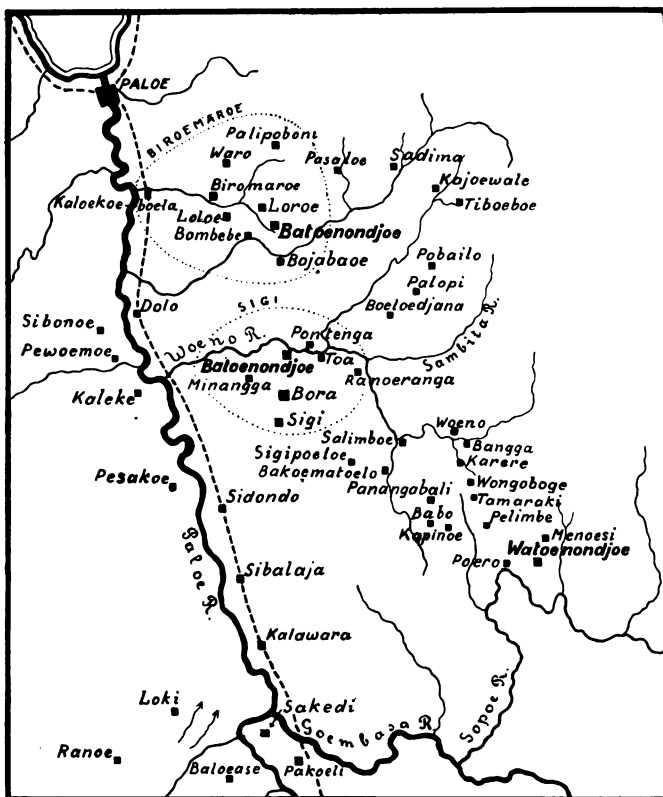
Paloe Valley

Judging by the literature only a single stone mortar, a so-called *w a t o e n o n d j o e*, seems to be recorded from the Paloe Valley. In their paper of 1898, "Van Posso naar Parigi, Sigi en Lindoe," ADRIANI and KRUYT mention this mortar.

Not far from Bora there is a village called Batoenondjoe, or Watoenondjoe. Of this village the two authors write as follows: "Watoenondjoe is eene vrij onaanzienlijke plaats van circa 30 huizen, en alleen daarom eenigzinds bekend, omdat de vorst van Biromaroe er meermalen zijn verblijf houdt, zooals ook thans. Watoe nondjoe beteekent 'Steen die op een rijstblok gelijk.' Werkelijk bevindt zich aan het begin van het dorp een groote steen met een rond gat er in, veel overeenkomst vertoonende met een rijstblok. Aan dezen steen brengt men geen offers, maar men gelooft zeker, dat indien met een rijststamper in het gat werd gestampt, het geweldig zou gaan donderen en bliksemen." Having no photograph or even diagram of this mortar and not having seen it myself, I cannot pronounce an opinion on it.

There may be more such hollowed out stones in the Paloe Valley. I was told that in a hill district southeast of Sigi there is at least one *w a t o e n o n d j o e*. Judging by the maps of this part of Celebes, there is in this district another village of the name of Watoenondjoe, and possibly this name refers to a stone mortar as is the case of the village of the same name in the Paloe Valley (Map 1). To the north of the village of Watoenondjoe near Bora, there is

on maps of Celebes in the district of Biromaroe a third village of the name of Batoenondjoe (Map 1), which suggests the presence of a stone mortar.



Map. 1 — Paloe Valley and the country round it.

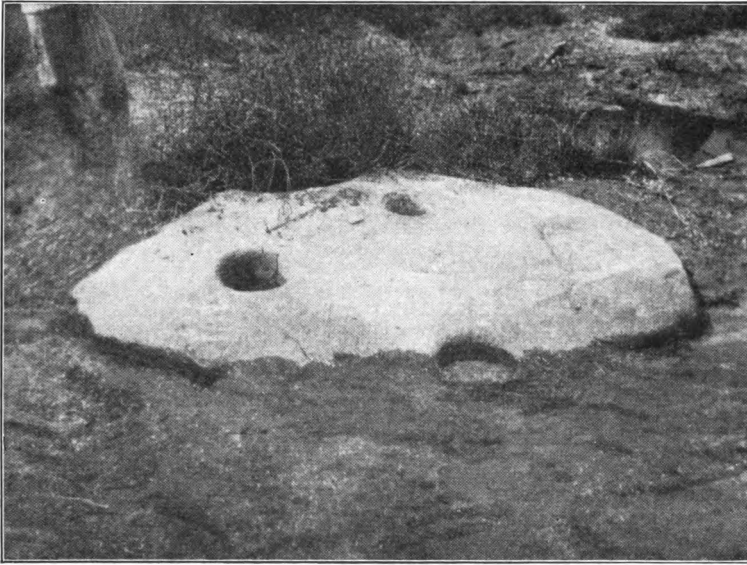
No other prehistoric worked stones seem to be recorded from the Paloe Valley or the districts in its immediate vicinity.

Lindoe

On my second visit to the Lindoe district, in January 1919, I saw two mortar-like stones near the shore of Lake Lindoe, not far from the village of Tomado. At the surface

of the water can be seen a flat stone with three hollows, like those of stone mortars, as well as a fourth hollow, not finished, however. The three big hollows measure about 20 centimetres in diameter by a depth of about 10 to 15 centimetres (fig. 1).

Not far from this stone, there is another one in the lake some distance from the shore, lying about 1.5 metre under



KAUDERN photo 1919

Fig. 1 — Stone with three hollows lying on the shore of Lake Lindoe.

the surface of the water. This stone is 50 centimetres thick and has in its flat upper surface a hollow like that of a mortar. When the lake is calm this stone can be observed without difficulty (Map 2).

According to the natives there is another similar stone in Lake Lindoe east of the Lindoe Island, but this I did not see myself.

Mr. RAVEN, the American who in 1917 visited Central Celebes, in his paper of 1926, "Stone Images and Vats of

Central Celebes," records a mortar-like stone with two hollows from Lindoe. On page 273 he says: "The only stone objects I saw in Central Celebes were mortars undoubtedly used in the pounding of grain, as the present inhabitants use wooden mortars. These stone mortars, each consisting of two hemispherical hollows six or eight inches in diameter and a foot or more apart in the rock, the upper surface of which was levelled and smooth, were at Lemo in the Koelawi district. Another was located near the Lake of Lindoe."

K o e l a w i

In this district I found several stone mortars, here called *n o n d j o e d j i*, mortars of the spirits, as well as a block of stone with numerous small hollows in its upper surface. Nearly all these stones were at Bola Papoe, Panapa, and Lemo, a row of villages on the ridge running north and south across the Koelawi plain (Map 2). At Bola Papoe some *n o n d j o e d j i* lay near its old temple, or *l o b o*. A couple of these stones are standing on edge, helping to support the house as will be seen in fig. 142 of my book "Structures and Settlements in Central Celebes" (fig. 2). At Panapa I saw a few mortars and at Lemo a mortar of common pattern (fig. 3 A) on the northwestern edge of the ridge, not far from the bungalow for travellers in which I lodged in 1918.

In 1918 part of a so-called *b e n t e n g*, or native fortress, situated close behind the bungalow, was torn down. This *b e n t e n g* which in olden times had surrounded the top of the Bola Papoe ridge, was a low wall of earth and stones, partly grown over with a hedge of bamboo. Among the stones brought to light, was a rather small *n o n d j o e d j i* (fig. 4). Its surface is not smooth like that of most mortars, but rather rough. Its hollow measures 10 centimetres in diameter by a depth of 4 centimetres.

A little to the north of the Bola Papoe ridge there is on the northern bank of the Oo a little hill surrounded by a

bamboo hedge near the village of Lili. On this hill there lies a *nondjoe dji* of common appearance with a single hollow. Very likely there are still other mortars with one as well as two hollows in Koelawi. I was told so by the Salvation Army missionary of the place, Mr. HENRY LOOIS.

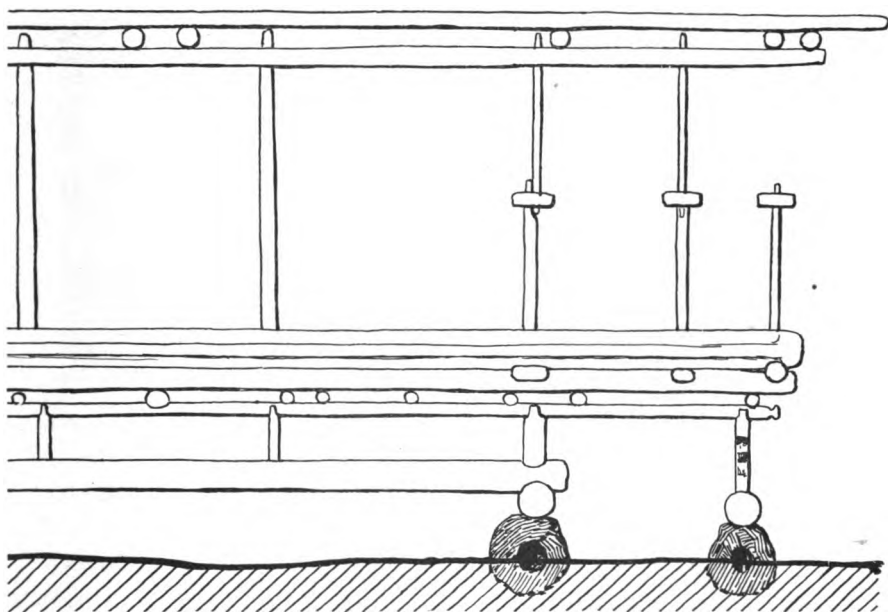
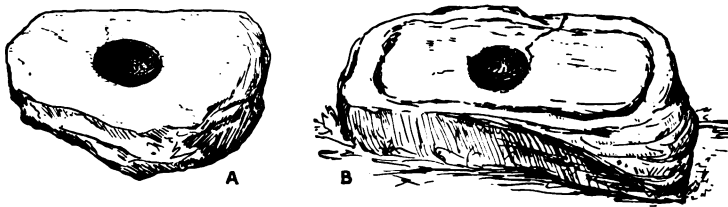


Fig. 2 — Detail of the construction of the Bolapapoe temple, Koelawi, showing two stone mortars supporting two poles of its foundation.

At the villages of Boladangko, Soengkoe, Mataoeë, etc., I did not notice any, however.

As mentioned above, RAVEN records mortars with two hollows from Lemo in Koelawi. I had my quarters at Lemo for several months, but strange to say never saw or heard of this kind of mortars at Lemo.

At the village of Panapa there was another kind of stone worked by man. Almost in the middle of the village,

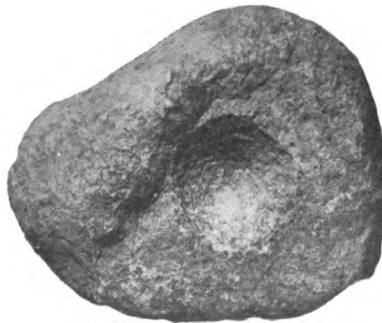


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Fig. 3 — Stone mortars. A, from Iemo, Koelawi; B, from Londja, southwest of Koelawi.

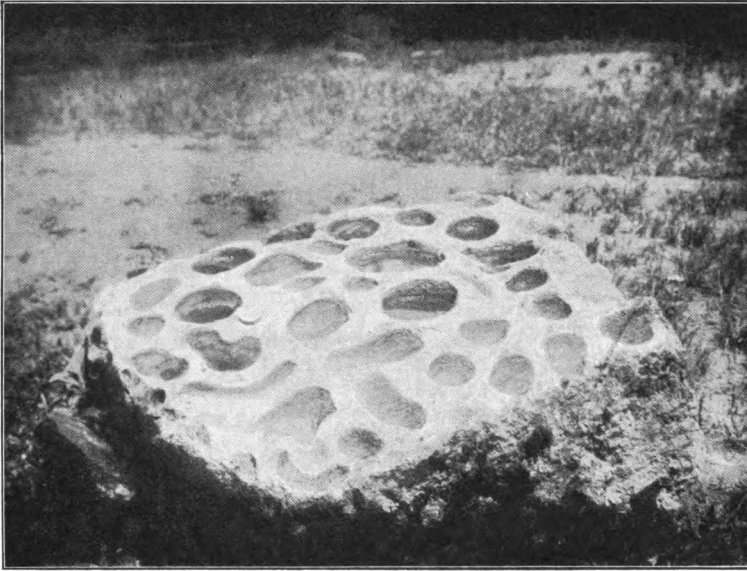
on the southern steep slope of the Bola Papoe ridge, lay a large block of stone with a rather flat and smooth top in which numerous more or less hemispherical hollows are made (fig. 5). These hollows have a diameter of 15 to 20 centimetres. In the figure a compass, 4.5 centimetres in diameter is seen on the stone. I have placed it there to show the size of the hollows.

When one has done about a third of the road leading from Koelawi to Winatoe in the south, one comes across a *nondjoe dji* of a strange pattern, lying in the neighbourhood of a couple of huts called Londja (fig. 3 B). It is an almost rectangular block of stone, the flat top of which



KAUDERN photo 1918 1: 6

Fig. 4 — Stone mortar excavated in the old fortress on the Bolapapoe ridge, Koelawi. (Gothenb. Mus. No. 26.9.755.)



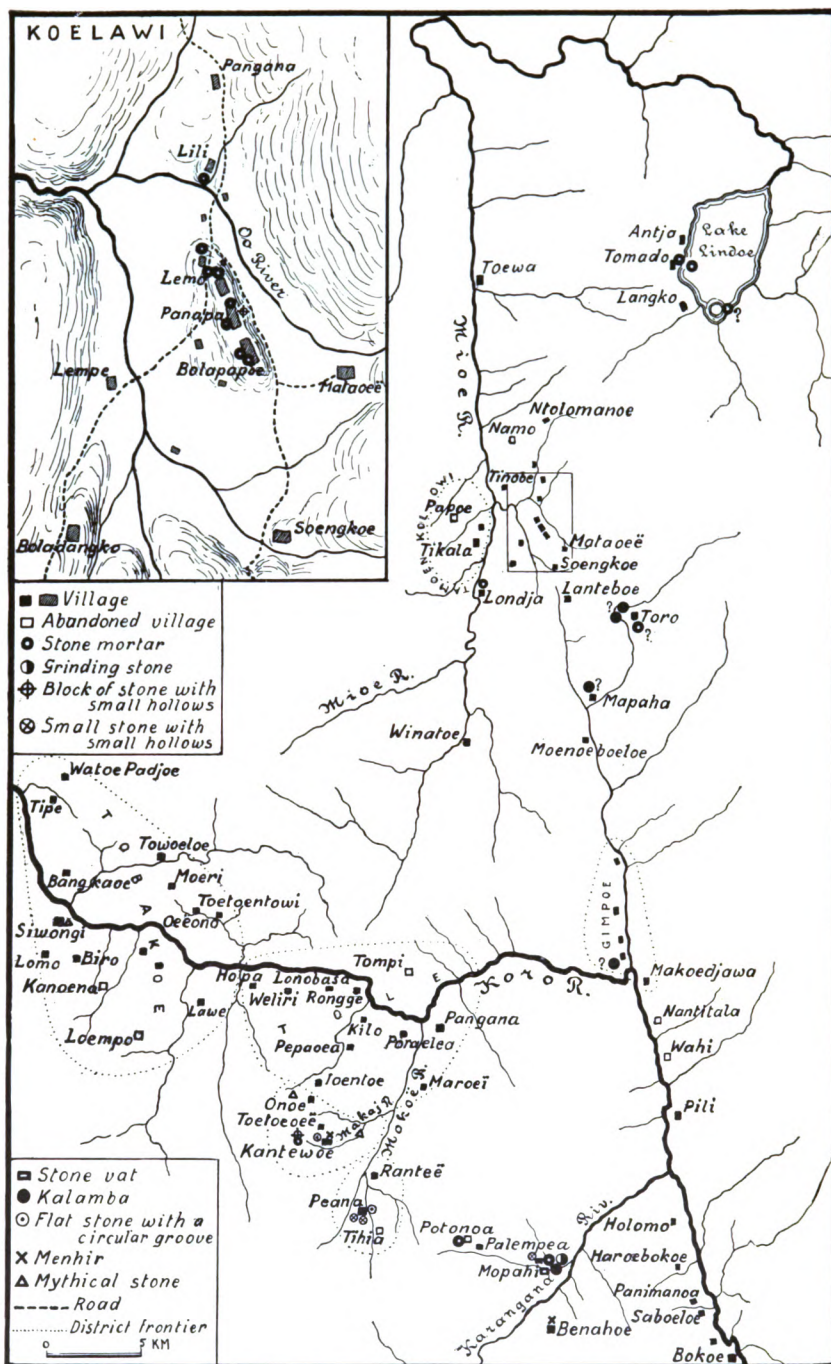
KAUDERN photo 1918

Fig. 5 — Block of stone with numerous small hollows. Panapa, Koelawi.

is bordered by a small raised wall, and in the center of which is a hollow. Its diameter is 17 centimetres by a depth of 10 centimetres.

T o r o

In January 1919 I paid a visit to the Toro district, southeast of Koelawi. I was told by the natives that in their district were two big blocks of stone with large hollows. Possibly this was the kind of huge stone vat, in other districts called *k a l a m b a*. My informants also mentioned a *n o n d j o e d j i*, but I did not see either of these things. Nobody had time to show me to the site of the stones. This may have been merely a pretence, the natives fearing to offend the spirits by showing a foreigner the stones, a way of thinking I met with later on when I wanted to see old worked stones at Kantewoe as well as at Mopahi. The stones in



Map 2 — Districts located on the sources of the Paloe, i. e. Lindoe, Koelawi, Tamoengkolowi, Winatoe; districts on the middlemost part of the Koro and its tributaries, i. e. Bokoe, Benahoe, Mopahi, Peana, Kantewoe, Tole, Tobakoe, Gimpoe, Mapaha, and Toro.

question were, however, not located at any of the villages of the Toro plain. They may be found in the neighbourhood of some fields on the western slopes, not far from the plain (Map 2).

On my way back to Koelawi I stopped at Mapaha, a small village on the eastern bank of the Mewe. At Toro, two women I spoke to had been quite positive about the existence of a worked stone near Mapaha. I could not discover it, and the natives of Mapaha, when questioned about it, said they knew nothing about such a stone. The Toro women's statement may have been correct, but the natives of Mapaha, fearing the revenge of the spirits, may have judged it safer to pretend not to know anything about the stone to get rid of a curious stranger.

Tamoengkolowi Tobakoe Tole

On a short visit in January 1919 to the village of Tikala in the Tamoengkolowi district, I did not see any mortars or other worked stones. When asked about such stones, the natives said they did not know there were any in their district. I had not time to visit the site of the oldest village of Tamoengkolowi, destroyed some years previously by a fire and after that abandoned, where ancient stones may be found.

During a tour to the district of Tobakoe, in the beginning of October 1919, I visited the villages of Lawe, Kanoena, Biro, Siwongi, Towoeloe, and Tipe, but I did not hear in any of these places of any *nondjoe dji* or other worked stones. The only stone of interest I saw, was a stone about 75 centimetres high, of irregular shape and ground by water. It stood at the entrance of the Siwongi temple. The natives held it to be a man turned into stone.

On the bank of a little stream near Siwongi a similar stone, but in this case a woman, was said to be located, but I was not allowed to see it. The natives of Siwongi could

not, or perhaps would not, supply any particulars about the two persons who had been turned into stone.

The stone at the entrance of the temple did not remind one much of a man. The bottom and bigger part was a shapeless mass: the body of the man; the top, smaller and narrower than the bottom, was his head.

Here I want to mention an obviously waterworn stone of slaty rock of dark colour, about 50 centimetres high, and standing near the trail from Onoe to Lawe. It had a striking resemblance to some of the so-called *se it* of the Lapps. The stone was held to be a man turned into stone. The natives called it *S e r o k o*, but there was nothing about it suggesting a human being. My native porters did not know of any legends about this stone "man" to which no special attention seemed to be paid, for instance in the form of offerings.

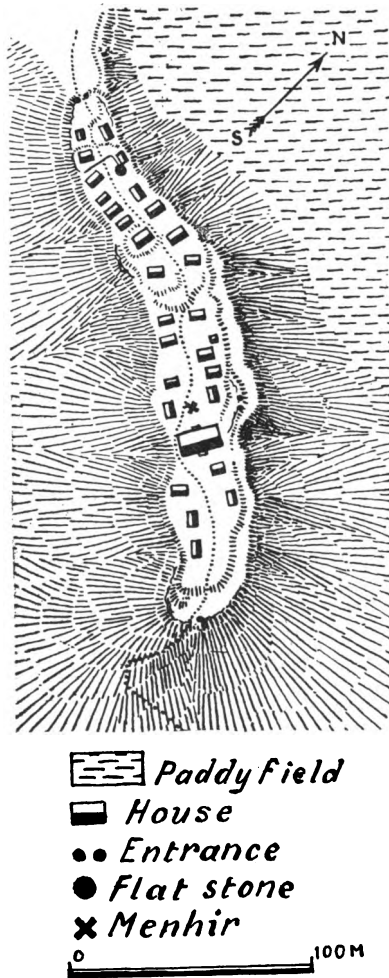
In the Tole district, immediately east of Tobakoe, I did not see any worked stones, or other stones of interest to ethnology.

K a n t e w o e

This district I thoroughly searched for worked stones, but only two were discovered. Besides there were some stones, strangely shaped by nature, to which the natives paid a certain amount of reverence.

At the village of Kantewoe (Map 3), not far from the northwestern entrance, there is at the corner of one of the houses lining the main road of the village, a flat stone with a shallow circular groove on its surface. In front of it two stones of irregular shape are standing. According to the natives they represent a man and a woman. It seems, however, more likely that they represent a penis and a vulva (fig. 6).

It proved impossible to find out anything about the flat stone with a circular groove. Nobody seemed to know anything about it. I suggested that I should take the stones

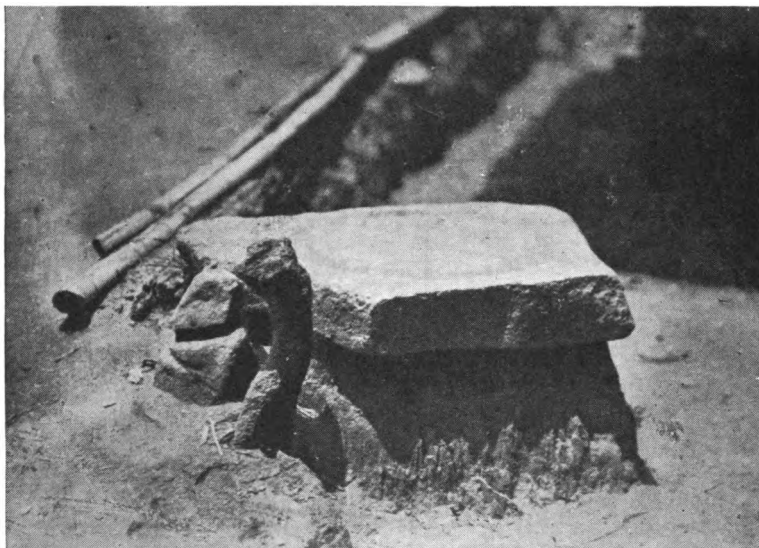


Map 3 — Plan of the village of Kantewoe.

with me, but the natives would not hear of it. The stones must remain where they were. No reverence seemed, however, to be paid to them, so far as I could understand.

I was told of a big stone with a hollow in it, located northwest of Kantewoe, but it was no easy task to find the

site, because it was a dangerous stone, the natives said. An old woman declared that a person who saw it, would be ill, and on the second day of the illness he would die. Nevertheless I insisted on seeing the stone and finally persuaded two schoolboys to take me to it.



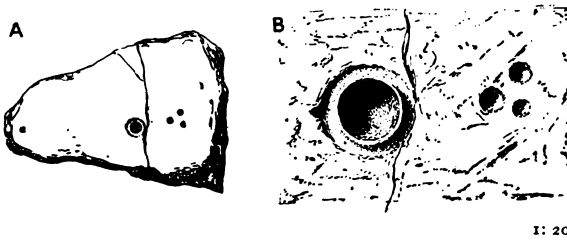
KAUDERN photo 1918

Fig. 6 — Stone with circular groove. Two stones standing close to it are believed to represent a man and a woman. Kantewoe.

The stone was located not far from the schoolmaster's house. In its upper rather flat surface was a big hollow, about 16 centimetres in diameter by a depth of about 12 centimetres surrounded by a circular groove. Besides there were four small hollows, three of which were close to the big hollow. The fourth was in the narrowest part of the stone (fig. 7). The natives called the stone *watoe koelili*. *Koelili* very likely is composed of *koe* and *lili*, the latter a word used all over Central Celebes and according to ADRIANI'S Bare'e Dictionary meaning "kring, rondte,"

circle. No special reverence seemed to be paid to this *watōe koelili*, but the natives kept aloof from it.

Another interesting stone was located at the square which opens a little to the east of the central part of Kantewoe. The square is bounded on the east by the long side of the native temple, the *lobō*, and on the other three sides lined by native huts. The stone stands in the centre of the square in front of the western entrance of the *lobō* (Map 3 x). It is taller than a full grown man, thin and pointed, reminding one of a menhir (fig. 8).



1: 20

Fig. 7 — Large block of stone with one big hollow and four small hollows, three to the right, one to the left. Near Kantewoe.

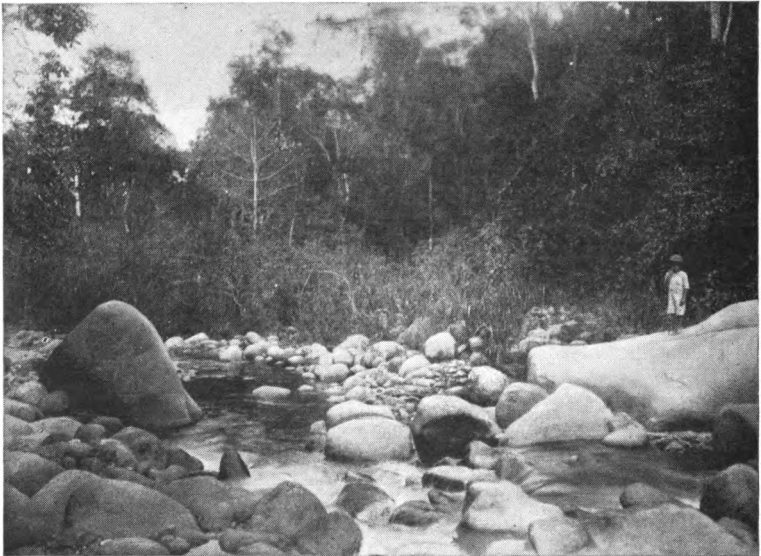
When questioned about the stone, the natives always gave an evasive answer, but for certain reasons I believe it to have been used as a torture pole, to which in olden times on certain occasions the victims who were to be killed, were fettered.

In this connection I wish to mention two huge blocks of stone, located on the banks of the Makai, at the foot of the hill where Kantewoe is situated (Map 2). The natives believed that the souls of the dead had to pass between these blocks on their way from the village to the kingdom of death. All feared the place and it was impossible to find a person to show it to me. The natives described it to me and told me how to reach it, so that I and the missionary were able to find our way to the dangerous gates of the dead (fig. 9).



KAUDERN photo 1918

Fig. 8 — Menhir standing in front of the temple of Kantewoe.



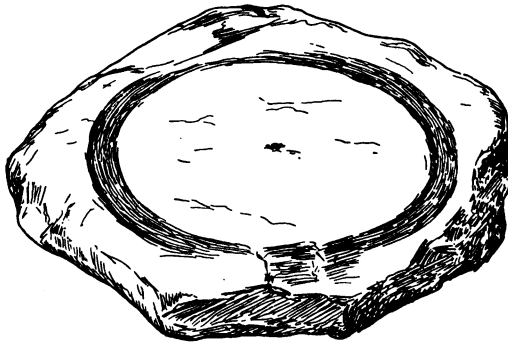
KAUDERN photo 1918

Fig. 9 — "The gates of the dead," in the Makaj at the foot of the Kantewoe hill.

Peana

In the district of Peana, about 10 kilometres south southeast of Kantewoe, I found some stones worked by man. I did not see any *nondjoe dji*, and the natives of the village of Peana said there were none in their village.

In the centre of the square, in front of the house of the chieftain, the *maradika malolo*, lay a flat stone with a shallow circular groove in its upper surface, reminding one of the stone at Kantewoe, described above, but with the



About 1:10

Fig. 10 — Flat stone with circular groove. Peana.

difference that the Peana stone had but a small shallow central hollow, and that the circular groove was not complete. As seen in fig. 10 it is crossed by another hollow. The inner diameter of the circular groove was about 43 centimetres. The natives called this stone *watoe moelampa*. They did not know who made the groove and the hollow in the stone, or how it had been used, and they did not seem to regard it with any special reverence or bring it offerings, but to a certain extent they feared it. When I suggested that they should help me to turn it upside down, so that I could examine its under-side, they said I must not do it. The stone must be left alone.

The word *moelampa* seems to be composed of *moe* and *lampa*, the latter word possibly being the

W. Kaudern. 2

same as the Bugis word *la mpa*, meaning chopping knife. The prefix *mo e* indicates a verb, thus *mo e la mpa* would be something done with a chopping knife. A stone used for some purpose connected with a knife, makes one think of a whetstone or a hone. I do not think the stone was used by the natives as a real whetstone or a hone. More likely they attributed supernatural power to it and believed this to be transferred to a knife which touched it, an idea I met with in the district of Bada, and which no doubt is

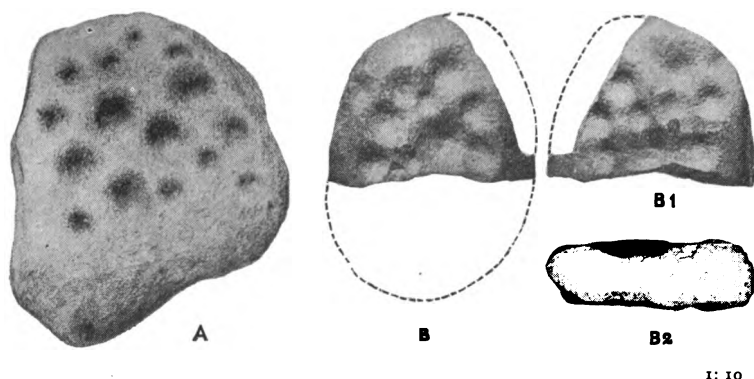


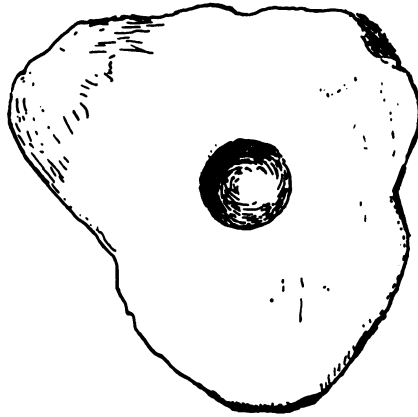
Fig. 11 — Stones with numerous small hollows on both sides. Peana. (B, Gothenb. Mus. No. 26.9.445.)

widely spread in Central Celebes. If my surmise is correct, the shallow groove crossing the circular groove, has been made by the chopping knives that have been passed over the stone in order to have a share of its power.

There were several more or less flat stones lying about the village of Peana (fig. 11). They had a diameter of about 35 to 40 centimetres by a height of 10 centimetres and rounded edges. In their upper as well as their lower surface several small hollows were irregularly spread over the surface. At least this was the case with the three stones I examined closely as well as of the half stone I took for my collection (fig. 11 B).

The natives called these stones *watoe morobe*, or *marobi*. They did not know anything about them and did not pay any attention to them. I could have taken as many of them I liked, but they were heavy, and I had to confine myself to the half of a broken stone.

Possibly *watoe morobe* only means a stone with a hollow in it. In the Bare'e language there is a word *morobe*. Of this ADRIANI in his Bare'e Dictionary writes:



I: 20

Fig. 12 — Stone mortar in an abandoned village, Potonoa, near Palempea.

“robe P. (Pebato), deuk, inzinking; morobe gedeukt, ingezakt, neergezakt.”

I counted twelve such *watoe morobe* about the village, and the natives said there were more outside the village, but these I had not the opportunity of seeing myself.

Separated from the Peana district by a high wooded ridge, a glen, watered by the small Mopahi river, opens towards the east southeast into the Karangana dale. In the upper part of the glen we find the small village of Palempea, and farther down, the village of Mopahi. At both these places I had the opportunity of examining several interesting prehistoric stones.

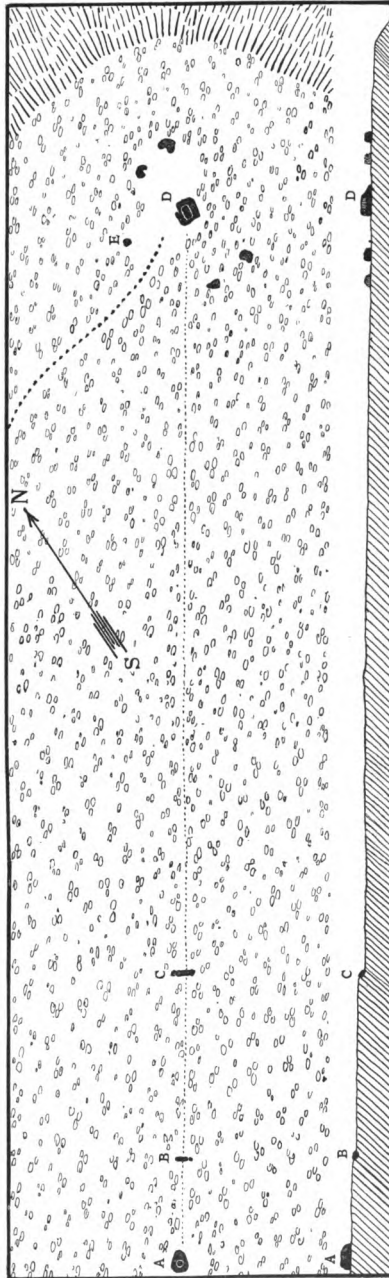
The village headman of Palempea told me he knew there was a *nondjoe dji* on a hill near the village. He was willing to guide me to it, and we climbed the hill together. After having scoured the bush for the stone, the headman at last found it (fig. 12). It was partly sunk into the ground, and the bigger part of it was hidden by a covering of plants. The man said that in olden times there had been a village, Potonoa, on the hill where we stood. I looked about for other worked stones in the neighbourhood but found none. The headman said he did not know of any more old stones in his village. The *nondjoe dji* he showed me had a diameter of more than one metre. Its upper surface was rather smooth. In its center there was a hollow with a diameter of 23 centimetres by a depth of 13 centimetres. My guide informed me that near Mopahi I would see two blocks of stone, each with a hollow in it so big that one could keep fish living in it.

M o p a h i

This village is situated on a triangular plateau, mostly under cultivation, bordered on one side by the deep ravine of the Mopahi, on the other by that of a tributary to this river (Map 2).

Arrived at Mopahi I learned that the two stones mentioned by the headman of Palempea were located in a little grove near the point of the plateau between the two rivers. I asked for a guide to show me the way, but nobody seemed inclined to help me. The natives no doubt feared reprisals from demons if they brought a foreigner to the site. In spite of the cautions of two old women, two school-boys finally agreed to take me to the stones, which we reached after a short walk (Map 4).

The larger of the two blocks is an irregular square with a hollow of the shape of a box in its top (figs. 13, 14). The two long sides each have a little step, that of the



Map 4 — Plan and vertical section of the site near Mopahi where a number of worked stones were observed. A, big block of stone with a hollow of the shape of an egg cup (fig. 15); B and C, flat stones, like steps; D, big block of stone hollowed out like a chest (figs. 13, 14); E = fig. 16 C. Two irregular black spots, north and south of the stone D, show rather large blocks. Groups of small ovals indicate second-growth jungle.

western side not complete. Either the execution of this stone work has never been very good, or the stone has suffered from the ravages of time. The steps, for instance, are rather indistinct, which should be attributed partly to the structure of the rock. The walls of the hollow are irregular and rough. The hollow is not in the center of the



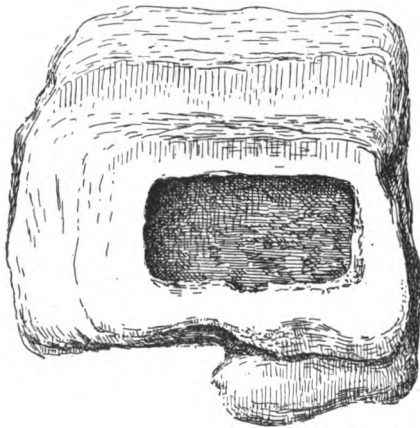
KAUDERN photo 1918

Fig. 13 — Large block of stone hollowed out like a chest. Near Mopahi.

block, but near the part of it facing south. The block stands here 106 centimetres above the ground. The length of the hollow is 136 centimetres by a depth of 35 centimetres. Its width is in the middle 76 centimetres, its southern rim 65, its northern rim 68 centimetres.

The second block, located about 90 metres southwest of the one described above, has a height of about 130 centimetres and its upper surface has a rather big hollow

the shape of which recalls that of an egg cup. Its depth is 53 centimetres, its slightly oval aperture 45×47 centimetres. About 32 centimetres above its rather pointed



About 1:50

Fig. 14 — Large block of stone hollowed out like a chest. Near Mopahi.

bottom, the hollow is wider and measures 55×58 centimetres (fig. 15).

At the time of my visit the hollows of the two blocks were filled with water. My two guides did not dare to

empty them, they even refused to get me a coconut shell so that I could do it myself. They were sure they would be punished by the demons if they touched the stones. I found a joint of bamboo cane for my purpose and scooped the water out with it. The schoolboys watched me from

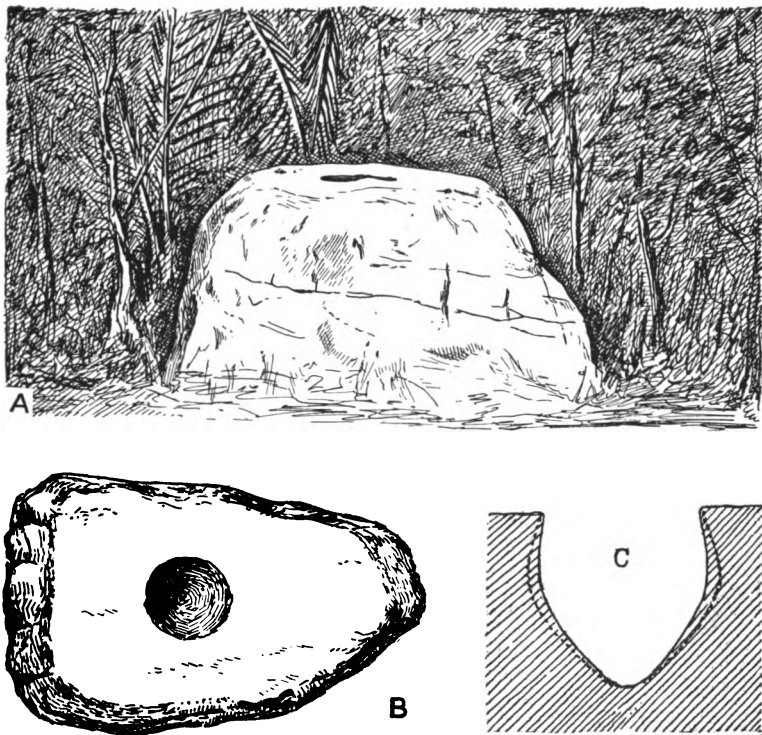
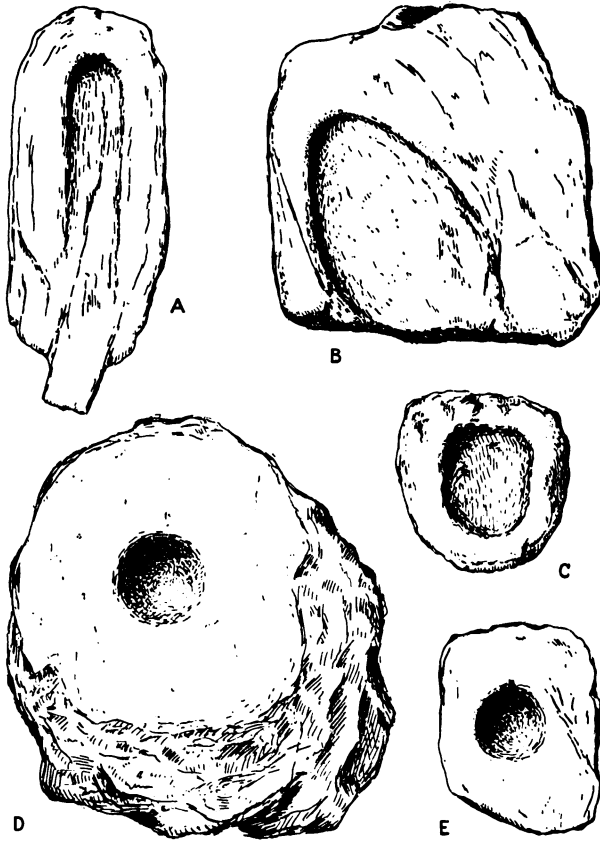


Fig. 15 — Large block of stone hollowed out like an egg cup.

a safe distance, but said I had nothing to fear from the demons who were afraid of the white men and fled when I began scooping out the water. When the hollows were empty, the boys ventured to approach the stones and even climbed them.

In the hollows I found nothing intimating the purpose

for which they had been used. The natives offered no other explanation than that these stones were a work of demons. The big one, hollowed out like a box, very well could have been used as a coffin. As to the smaller stone, its shape



1: 20

Fig. 16 — Worked stones from the site near the village of Mopahi. A, B, C, grinding stones; D, E, stone mortars.

in some degree recalls that of a mortar. If grain had been pounded in it, the narrow aperture would have prevented it from leaving the mortar, but the height of the block, 135 centimetres, speaks against the surmise of its having

been used as a mortar. The natives said there were no more old worked stones that they knew of in their district.

Some days later I returned to Mopahi on my way home and set about to inspect the plateau closely. I had passages hewn through the bush in various directions and was in this way able to search practically the whole grove. I found six more stones worked by man. Two of these are common *nondjoe dji* with a plane surface in the center of which is a hollow of medium size (fig. 16 D, E). The upper surface of the smaller specimen is about 55×65 centimetres, the diameter of the hollow 19×20 centimetres by a depth of 12 centimetres. The bigger mortar has a height of 50 centimetres. Its hollow has a diameter of 25 centimetres.

Beside these mortars, I discovered three stones, each with an oval, longish, shallow hollow in the upper surface, intimating that they had been used as grinding stones (fig. 16 A, B, C). The smallest specimen is located 5 metres due west of the stone hollowed out like a box (Map 4 E). It has a length of about 40 centimetres by a breadth of 37 centimetres. Its hollow measures 25×30 centimetres with nearly parallel sides. The hollow is only a few centimetres deep (fig. 16 C).

The second grinding stone is almost square, its sides measuring 90 centimetres (fig. 16 B). Crossing it diagonally, but nearer one corner of its smooth upper surface, there is an oval hollow. It measures 60 centimetres in length by a maximum breadth of 40 centimetres and a depth of 8 to 9 centimetres.

In the third stone (fig. 16 A) there is a hollow of uniform breadth, 15 centimetres, and a length of about 58 centimetres. One end of the hollow is roundish, the opposite end imperceptibly merges into the surface of the block. In its center the groove has a depth of 6 centimetres, near its rounded end of 3 centimetres.

The last stone I discovered is sunk deep into the ground (fig. 17). It has a circular hollow the diameter of which is one metre. The rim of the hollow is quite smooth. The hollow was filled with earth, and a palm had taken root in it as in a big flower pot. I tried to remove it, but with my simple tools it could not be done. The pot



About 1:50

Fig. 17 — Large block of stone hollowed out, possibly a *kalamba*.
Near Mopahi.

evidently being too small for the tree, its roots had found their way beyond its rim. Possibly this is a vat of the kind met with in the districts of Bada and Behoa, a so-called *kalamba*, which will be described in a following chapter.

Within the village of Mopahi I saw a stone with several small hollows, closely similar to the *watoemorobe* lying about the village of Peana.

When the thicket surrounding the stone hollowed out like a box was cut down, I found several rather big blocks

round it (Map 4). At a distance of 24 metres from the other big stone, the one with an egg cup shaped hollow, the ground rises slightly, and there I found a long stone, like a step (Map 4 C). Eight metres from the big stone there is another stone like a step, but this is smaller than the one first mentioned (Map 4 B).

It can hardly be doubted that this grove near Mopahi is an old site, presumably of a village. An excavation certainly would be interesting and worth the trouble.

KRUYT on page 1 of his paper of 1932, "L'immigration Préhistorique dans les Pays des Toradjas Occidentaux," enumerates the stone vats, *k a l a m b a*, whole and broken, which he himself has found in Central Celebes. "Parmi le nombre des kalambas *que j'ai trouvés moi-même*,¹ je compte ceux qui sont brisés ou desquels il ne reste qu'un fragment, si dans ce cas on peut certifier que ce fragment provient d'un kalamba." I suppose this "*que j'ai trouvés moi-même*," means "which I myself have *seen*," since KRUYT cannot claim to be the *discoverer* of *all* the *k a l a m b a* of Central Celebes. A Dutch Government official, KILJAAN, is the first author who reports stone vats from the district of Besoa (twenty-five specimens). In a parenthesis KRUYT mentions "1 à Gimpoe, 3 ? à Mapahi," without further comments. The place KRUYT calls Mapahi, no doubt is the village Mopahi. On KRUYT's "Schetskaart van Midden-Celebes" the name of the village is spelled Mopahi. Possibly this refers to the three big hollow blocks which the present author discovered in 1918 at Mopahi and described and reproduced in "I Celebes Obygder" in 1921. Of these, only one, however, could be said to recall the *k a l a m b a* of Central Celebes.

B e n a h o e

This district is situated on the right bank of the Karangana (Map 2). Having seen several interesting ancient

¹ Italics are mine.

stones at Mopahi, I expected Benahoe to be as interesting in this respect, but I failed to discover a single stone worked by man. The natives said there was no *nondjoe dji* or other old stone in their district. It cannot, however, be taken for granted that they told the truth. They may have had some reason, fear of demons perhaps, for not telling me of their old stones.

Not far from the northern gable of the temple, near the road, stood a menhir, almost of the height of a man. It was impossible to learn anything about it. Presumably it had had the same function as the big stone in front of the *Kantewoe lobo*. The natives' unwillingness to speak to me of the menhir, intimates a belief in certain stones possessing supernatural power, and this accounts for their reserve. When I arrived at Benahoe, the news of my interest in old worked stones had already reached the district.

Tawaelia

No mortars or other prehistoric stone objects from this district have as yet been recorded (Map 5).

In 1919 I visited the district of Ondae. Mr. RITSEMA, the Dutch missionary stationed in the district, showed me a photograph of a stone mortar of a type unknown to me. He said it was from Tawaelia. It seemed to be round with a flat upper surface, surrounded by a low wall. In its center was a hollow of common appearance. The top of the mortar was wider than its bottom. Having no photograph, I can only supply a diagram of it (fig. 18). As far as I am aware

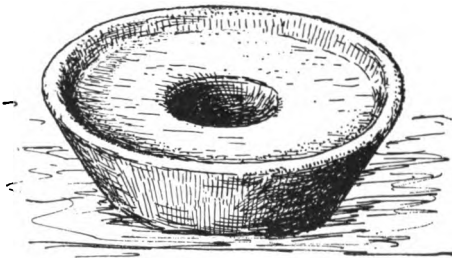
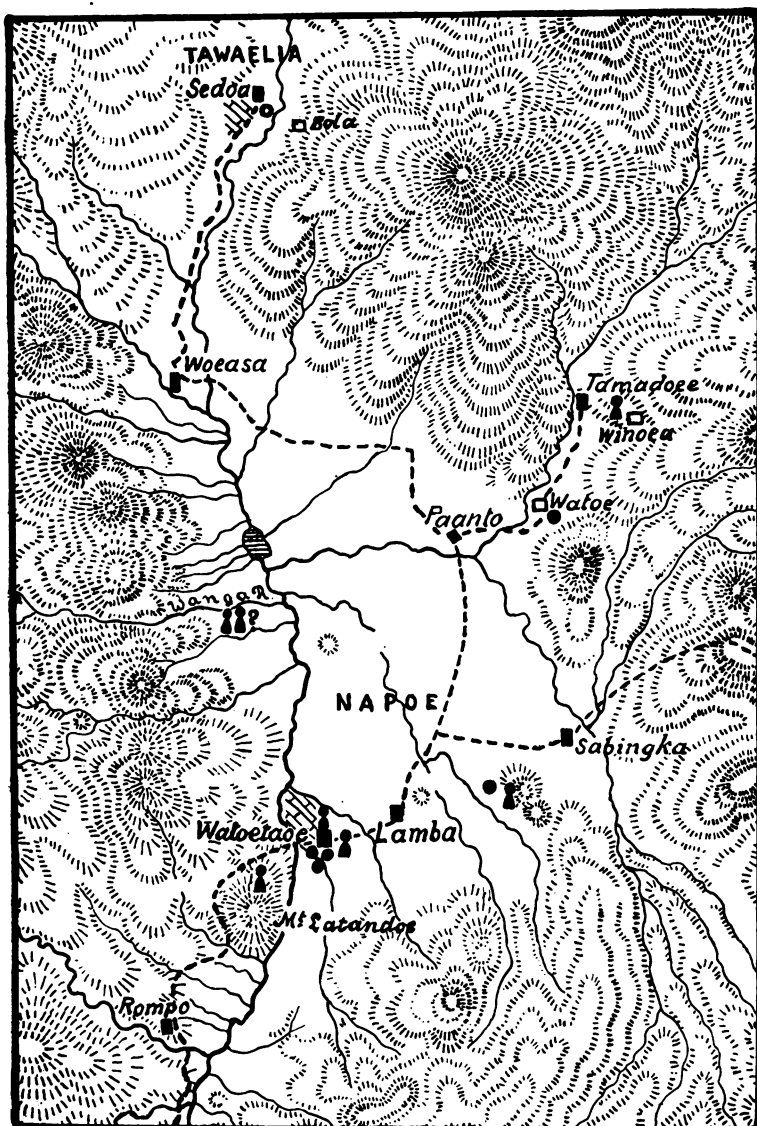


Fig. 18 — Stone mortar from Tawaelia. Sketch referring to a photograph in the possession of Mr. RITSEMA.



[Cross-hatched] Paddy field ● Stone vat ■ Willage
 [Figure icon] Stone image ○ Stone mortar □ Abandoned village
 - - - - - Road 0 10 KM

Map 5 — Sites of megalithic finds in the districts of Napoe and Behoa.
 This map is based on KRUVT's Schetskaart van Midden-Celebes.

myself, I can only give an account of the statements as found in literature on the subject.

ALBERT C. KRUYT seems to be the first author who mentions the stones of Napoe. In a paper he calls "Nadere gegevens betreffende de oudheden aangetroffen in het Landschap Besoa (Midden-Celebes)," published in 1908 in "Tijdschr. v. Indische Taal-, Land- en Volkenkunde," he, besides the stone monuments of Behoa, also mentions a stone image and a stone vat in Napoe. On page 550 he says: "Ook in het landschap Napoe heb ik dicht bij het dorp Pabingka¹ een dergelijk vrouwelijk beeld gevonden en een vat, niet rond zooals in Besoa, maar ovaal, veel hebbende van een badkuip. De inlandsche benaming van dit vat beduidt dan ook 'badplaats van den vorst.' In dit vat bevindt zich (mede in steen gehouwen) een zitbankje."

The same year KRUYT gave a more detailed account of the Napoe stones in a paper called "De berglandschappen Napoe en Besoa in Midden-Celebes," in "Tijdschr. v. h. Kon. Ned. Aardr. Genootschap."

On page 1341 he writes: "In Napoe vond ik dergelijke oudheden slechts op ééne plaats terug, en wel niet ver van Sablingka, aan den voet van het oostelijk gebergte, nabij de helling van een heuvel die *Tokeoba* heet. Daar staat een beeld, dat 1,20 M. boven den grond uitsteekt, en eene breedte over de schouders heeft van 78 cM. Het beeld staat niet meer, maar helt voorover (fig. 19 A). Eenige steenen liggen om het beeld heen, waarschijnlijk bij de oprichting er om heen geplaatst om het meer stevigheid te geven. Een eind van dit beeld verwijderd is een soort kuip van steen, niet zoo hoog als de potten van Besoa, en langwerpig-ovaal van omtrek. In deze kuip is ook een dergelijk steenen bankje uitgehouwen als beschreven bij den eenen pot in Besoa. De kuip is echter niet goed afgewerkt; in de nabijheid liggen nog een paar brokken steen, waaraan men blijkbaar was begonnen te houwen of te

¹ Evidently a misprint for Sablingka.

beitelen. De steenhouwers hebben deze plek dan spoedig weer verlaten. Het beeld noemde de To Napoe: *Watu nongko*, of met een eigen naam: *Tamaboelopi*. De kuip draagt den naam van *pandiu i Datu*, 'de badplaats van den vorst.'

De inlanders-zelfen, tegenwoordige bewoners van het land, hebben niet den minsten eerbied voor deze overblijfselen uit de oudheid: op de randen van de steenen potten¹

A.

B.



After KRUYT

RAVEN photo 1917

Fig. 19 — Stone image in Napoe. A, after KRUYT (1908), called *Watu nongko* or *Tamaboelopi*, near Sablingka; B, after RAVEN (1917), called *Watoe Langko*, near Lamba.

slijpen zij hunne hakmessen. Men baadt of wast zich ook met het regenwater, dat zich in die potten heeft verzameld, in de vage hoop, dat er eenige kracht voor den bader van zou mogen uitgaan. Aan de beelden worden geenerlei offers gebracht. Soms wiedt een jager het onkruid om het beeld in Napoe, in de hoop daardoor voordeel te zullen hebben op de jacht; maar overigens is men voor deze steenen voorwerpen onverschillig. Dit zoud er op wijzen, dat die beelden en potten *niet* vervaardigd zijn door de voorouders van het tegenwoordig levende geslacht.

¹ This in all probability refers to the vats of Besoa.

Hadden de vaderen deze voorwerpen nagelaten, dan zouden zij als relieken heilig zijn."

KRUYT then gives his own opinion regarding the origin of these stone monuments as well as the natives' view on the matter. When asked about the origin of the stones, the natives answered: "Voordat er eenig mensch (bedoeld wordt een To Besoa) in dit land kwam, waren beelden en potten er reeds." He then calls attention to the following facts: "Inscripties waren nergens er op te vinden; het eenig opvallende zijn de haakvormige lijnen op de borst, en de scheefstaande oogen bij de mannelijke gezichten; de vrouwelijke hebben ronde oogen. In Napoe vertelde men mij, dat het beeld daar een hoofd was geweest, dat met een ander hoofd had gevochten; eerstgenoemde werd verslagen, en veranderde in steen, en toen de ander in Besoa was gekomen, veranderde deze ook in steen. In Besoa wist men echter niets van dit verhaal. Hoogstwaarschijnlijk is het beeld in Napoe eene vrouw, afgaande op de ronde oogen. Er waren dan ook andere To Napoe, die mij zeiden, dat het beeld eene vrouw was, die over hare kinderen (de stenen aan haren voet) weende. Uit alles blijkt, dat men er niets van weet, en dat geenerlei overlevering over deze beelden en potten bestaat."

As to the sex of the statue, it is to be noticed that its name, *T a m a b o e l o p i*, indicates a man. As soon as the firstborn child of a family has been given a name, in this case *B o e l o p i*, its father and mother will lose their own names and become the father of Boelopi, *T a m a b o e l o p i*, and the mother of Boelopi, *T i n a b o e l o p i*. Its must have been politeness on the part of the natives, who will never contradict or correct a superior, which made them agree with Doctor KRUYT that *T a m a b o e l o p i* represents a woman, as he was inclined to think judging by its round eyes. In his French paper, KRUYT spells the name *T o m a b o e l o p i*.

KRUYT ends his account of the stone monuments in

Napoe and Besoa by saying: "De oorsprong van deze oudheden en het doel, waarmede zij werden gemaakt, liggen nog in het duister."

In a note appended to KRUYT's paper, the editor of the periodical enters upon a long discussion of the origin and the use of these prehistoric stones. To this I shall come back later on.

KRUYT's representation of the stone image of Napoe, the *watunongko* or Tomaboelopi, I have reproduced in fig. 19 A.

In a paper of 1909, "Het landschap Bada in Midden-Clebes," published in "Tijdschr. Kon. Nederl. Aardrijksk. Gen.," KRUYT adds some data about a stone image in Napoe. On p. 360 he says: "Ter aanvulling van de reeds gegeven beschrijving van deze oudheden in de berglandschappen van Midden-Celebes, zij het mij vergund hier in te lasschen de beschrijving van een plek in Napoe, welke plaats ik bezocht, nadat het opstel over de landschappen Besoa en Napoe reeds geschreven was. De bedoelde plek heet *Watoe taoe*, 'steen als een mensch:' een vlakke heuvel in de onmiddellijke nabijheid van het voormalige dorp Peore. Niet lang geleden hadden de To Napoe daar een dorp, dat ook *Watoe taoe* heette... Den naam *Watoe taoe* 'steenmensch' heeft de plek te danken aan een steenen beeld, dat daar staat. Het stelt eene vrouw voor en is geheel van hetzelfde type als *Langke boelawa* van Bada. Alleen heeft het beeld iets, dat ik bij geen der andere beelden heb opgemerkt: boven op het hoofd is aan iedere zijde een uitwas in den vorm van een halve kogel uitgebeiteld, waarschijnlijk eene nabootsing van de haardracht der vrouwen uit dit oude tijdperk."

This description of the image tallies with a photograph supplied by GRUBAUER in his book of Celebes, here reproduced in fig. 20.

The next person supplying some data about the ancient monuments of Napoe, seems to be GRUBAUER. In his book "Unter Kopfjägern in Central-Celebes," he writes on page

487 the following about his visit to Napoe in 1911: "Die grösste Merkwürdigkeit des Hauptdorfes Watutau war ein uraltes rätselhaftes Steinbildnis. Es stand ziemlich im Mittelpunkt des Dorfes, das nach ihm seinem Namen erhalten hat (= Steinmensch, watu = Stein, tau = Mensch). In rohen Umrissen zeigte der gegen 1½ M. hohe Granitblock die Formen einer hockenden menschlichen Figur. Über die Entstehung und Herkunft dieser seltsamen Skulptur, der eine gewisse Ähnlichkeit mit verwandten in Java und Sumatra vorkommenden Monolithen nicht abzusprechen ist, wusste mir niemand das geringste anzugeben. Der Stein wird von den Eingeborenen zwar nicht gerade göttlich verehrt, übt aber dennoch einen starken übersinnlichen Einfluss auf sie aus, so dass besonders häufig Frauen hieher kommen, um dem Bildnis ihre Kummernisse anzuvertrauen und Siroiöffer darzubringen."

The village of Watoe taoe, which KRUYT in 1909 says had not long ago been located on the low hill of the same name where he found the image called Watoe taoe, seems to have been rebuilt, since GRUBAUER states Watoetaoe to be the chief place of Napoe in 1911. On KRUYT's map of Central Celebes Watoetaoe is marked as the biggest village of Napoe.

Mr. RAVEN is the third author treating of the stone monuments of this part of the island. In his paper "The Stone Images and Vats of Central Celebes," published in 1926, he gives an account of his observations in Napoe, Behoa, and Bada, and supplies a series of excellent photographs. Of the monuments he saw in Napoe he gives but a short description. On page 273 he says: "In Napoe were two stone images and one hollowed-out rock very unlike the vats of Besoa and crude in comparison, though its purpose may have been similar." And on page 274: "The Napoe images (Figs. 1, 11) (here figs. 19 B and 21) differ from those of Bada and Besoa in the apparent lack of headgear and the lack of arms and hands. A mouth is not shown in the figures of Bada and Besoa, but my photographs of the Napoe

specimens appear to show in each case what may be a slight groove below the nose, suggesting a mouth. The placing of the ears in the Napoe specimens is lower on the sides of the head, thus more normal than in the figures of Bada and Besoa."



GRUBAUER photo 1911

Fig. 20 — Image in the village of Watoetaoe, Napoe.

RAVEN's photographs of the Napoe monoliths differ, however, from the representations supplied by KRUYT and GRUBAUER. RAVEN's fig. 1, here reproduced in fig. 19 B, certainly has many traits in common with KRUYT's diagram, fig. 19 A. Both images are leaning towards the right, and

both have an ornament like hooks on their breast. But the statements of the two authors differ as to the site where the image stands. About the statue in RAVEN's fig. 1 he says: "The leaning statue Watoe Langko stands on a long low ridge near the village of Lamba, at the base of high mountains which surround the plain of Napoe. Note the hooks sculptured on its breast." KRUYT again, says the image stands not far from the village of Sabingka, "aan den voet van het oostelijk gebergte, nabij de helling van een heuvel die Tokeoba heet." The site of Tomaboelopi as given in KRUYT's map (Map 6), is not east of Sabinka but some kilometres southwest of this village. The distance from Lamba to the site in question is about as much. The different statements of the two authors in all probability should be attributed to the fact that KRUYT, when visiting Napoe, came from the northeast and first arrived at Sabingka, contrary to RAVEN who came to Napoe from Behoa in the southwest and from Lamba reached the site of Tomaboelopi. The native name of the image KRUYT states to be *W a t u n o n g k o* or *Tamaboelopi*. RAVEN says it is *W a t o e L a n g k o*, which very well could be the same as *W a t u n o n g k o* considering the possibility of misprints and hearing mistakes in the case of a foreign language.

Of the second Napoe statue RAVEN says: "Fig. 11. The stone man at Napoe. An image stands among ferns in second-growth jungle not far from the village of Watoe Taoe (= Stone Man) in the Napoe district. . ." This image in so many respects deviates from the representation supplied by GRUBAUER, that it cannot possibly be the same statue. Presumably there are two statues at Watoetaoe, one according to GRUBAUER standing in the center of the village, and another at some distance from the village as stated by RAVEN (Map 5).

In his paper RAVEN also reproduces a hollowed-out block of stone, evidently the one discovered by KRUYT in 1908. RAVEN says: "Fig. 4. Elliptical vat at Napoe. Unlike the circular vats of Besoa this one is long, not deeply

hollowed-out, and comparatively crude. The natives referred to it as the 'bath' of a prince." (fig. 22)

On the occasion of the first prehistoric congress at Hanoi, KRUYT in 1932 lectured on "L'immigration Préhistorique

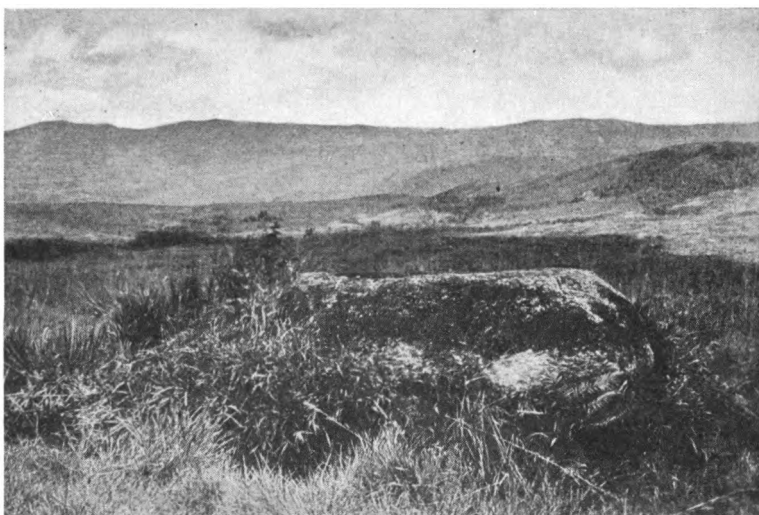


RAVEN photo 1917

Fig. 21 — Image near Watoetaoe, Napoe.

dans les Pays des Toradjas Occidentaux." He stated that in the district of Napoe there are eight stone vats, *k a l a m b a*, but does not give any details about where to find them, their size or appearance. On Pl. II, figs. a, b, c, of his paper, KRUYT reproduces a big vat, on the outside decorated with

incised figures (fig. 23). It is stated to be a "Pot de pierre à Napou." He seems to consider this hollowed-out block of stone a *k a l a m b a*. Whether this vat is the same as the one he in 1908 called "een soort kuip van steen," or another vat he has discovered later, is not clear. The stone he saw in 1908 was "langwerpig-ovaal van omtrek," and was



RAVEN photo 1917

Fig. 22 — Elliptical vat in Napoe. The natives refer to it as the bath place of a prince.

"niet goed afgewerkt." Its name he stated to be Pandiu i Datu.

He may not have noticed any ornaments, or he would have mentioned it. The vat he shows in 1932 seems, judging by the three photographs, also to be longish oval, or rather rectangular with rounded corners. It remains an open question whether there are two, or even more, longish oval stone vats in Napoe.

Of the *k a l a m b a* in Napoe, KRUYT in his paper of 1932 on page 3 says: "L'unique figure humaine, taillée dans un kalamba et sur laquelle le sexe a été indiqué, est la figure



After KRUYT

Fig. 23 — Stone vat (Watoe loemoe?). Napoe.

de femme au Watou loumou (Napou). Si nous observons les têtes et les figures humaines, qui ont été appliquées sur les kalambas. nous trouverons sur le kalamba *Pendoia Datou* (Napou) une face taillée avec des yeux ronds. Les yeux des faces sur le *Watou loumou* (Napou) sont ronds et ovales; ceux du kalamba près de Watou sont obliques."

Thus it would seem as if there were three *kalamba* in Napoe, all adorned with incised human faces. One of these is the Watoe loemoe and another the *Pendoia Datou*. I suppose the latter is the stone vat KRUYT saw in 1908 not far from Sabingka and called Pandiu i Datu, "de badplaats van den vorst," and to which RAVEN refers as the "bath place of a prince." The third *kalamba* is said to be near Watou. On KRUYT's map of Central Celebes there is a hill as well as an abandoned village called Watoe, and I suppose it is in the neighbourhood of this village that the *kalamba* is found.

From the text we cannot conclude if the *kalamba* pictured by KRUYT, is one of these three, since, according to this author, there are in all eight *kalamba* in Napoe. It is, however, interesting to learn that at least three of them are ornamented with human faces.

In his paper of 1932, KRUYT states that there are twelve stone images in Napoe, but the particulars he supplies about six of them are too scanty to give the reader an idea of their size and aspect. Of the monolith which he in 1908 discovered at Watoetaoe, he says it faces east. Of the hair of this image he writes the following: "Watou taou fait supposer que les cheveux ont été arrangés en deux pelotes." This is clearly seen in GRUBAUER's figure of the statue (fig. 20). Judging by KRUYT's statement on page 2 there seem to be several *kalamba* near this monolith.

Two of the images from a place called Wanga represent men, since on each a penis is shown. This Wanga possibly is a village situated on a tributary to the Tawaelia, the Wanga, which empties into it a little to the south of Lake Rano as

seen in KRUYT's map of Central Celebes. These statues have round eyes. On page 3 KRUYT writes: "Les trois autres statues du sex masculin (une à Pokekea et deux à Wanga) ont les yeux ronds."

One of the Wanga statues is said to have an ornament reminding one of a moustache (p. 4): "Un ornement de la figure ressemblant à une moustache; se trouve sur les faces d'un couvercle de kalamba à Pokekea en Besoa, ainsi que sur une statue à Wanga (Napoe)."

Not having seen the image in question, I cannot pronounce an opinion on its supposed moustache, but the *kalamba* cover in Besoa which KRUYT refers to, I know very well and have reproduced in 1921 in my book "I Celebes Obygder," Vol. I, p. 498, fig. 160 and Vol. II, p. 67, fig. 29: 17. As will be seen in figs. 41 and 42, this decoration, unlike a moustache, does not adorn the upper lip, but is found below the under lip and ends in two points near the corner of the eye.

A solitary image is according to KRUYT found at Latandoe. He says it faces west, with a deviation of 20° towards south. On his map of 1916 there is a hill called Latandoe, southwest of Watoetaoe, and this, I suppose, is where the image in question stands.

In the northeastern part of Napoe there is on KRUYT's map a village called Winoa. From this place he reports a stone statue known as *Pekasele*. He says it faces west northwest. Finally he mentions a statue called *Tomaboelopi*, evidently the one he discovered in 1908 near Sabingka. "Het beeld noemde de To Napoe: *Watonongko*, of met een eigennaam: *Tamaboelopi*." This is facing southwest.

In one respect this *Watonongko*, or *Tamaboelopi* seems to differ from all other monoliths of Napoe. On page 4, KRUYT writes: "Sur la poitrine de trois statues d'hommes (une à Napou, deux à Besoa) on a appliqué un ornement qui rappelle le motif de cornes."

When I visited the district of Behoa in 1918, the natives said there was a stone image somewhere near an old trail leading from Napoe to Toro. This image still seems to be unknown to science.

In his paper of 1932 KRUYT does not mention any stone mortars, *nondjoe dji*, or *watoe nondjoe* from Napoe. Of prehistoric sepulchral earthenware urns, he writes as follows: "Enfin il y a des endroits qui étaient spécialement destinés à l'enterrement d'urnes au bord de la rivière du Tawaelia en Napou." (page 7)

From what has been said above it is evident that our knowledge of the prehistoric stones of Napoe is rather unsatisfactory and imperfect.

B e h o a

The district of Besoa, or Behoa harbours numerous stone relics of antiquity. Of these some have been described. The first person reporting ancient stone objects from Behoa seems to be a Dutch Government official KILIAAN. In a paper "Oudheden aangetroffen in het landschap Besoa, Midden-Celebes," published in 1908 in "Tijdschr. v. Ind. Taal-, Land- en Volkenk.," he describes one stone image, twentyfive *k a l a m b a*, and four stone covers. This account is illustrated with one map and nine drawings (Map 7 and fig. 24).

KILIAAN says ancient stone objects are found at two places in Besoa: at *Boeloe Lèli* and at *Podé in Pokékéo*.¹ From the former site he records the image and five stone vats, from the latter twenty vats and four covers.

The stone image is made of limestone according to KILIAAN, and is 1.75 metres high by a diameter of 0.50 metre (fig. 24 G). Limestone, he says, is found in the neighbourhood. The image represents a woman. The

¹ This is a misprint for Poda 'mPokékéo.

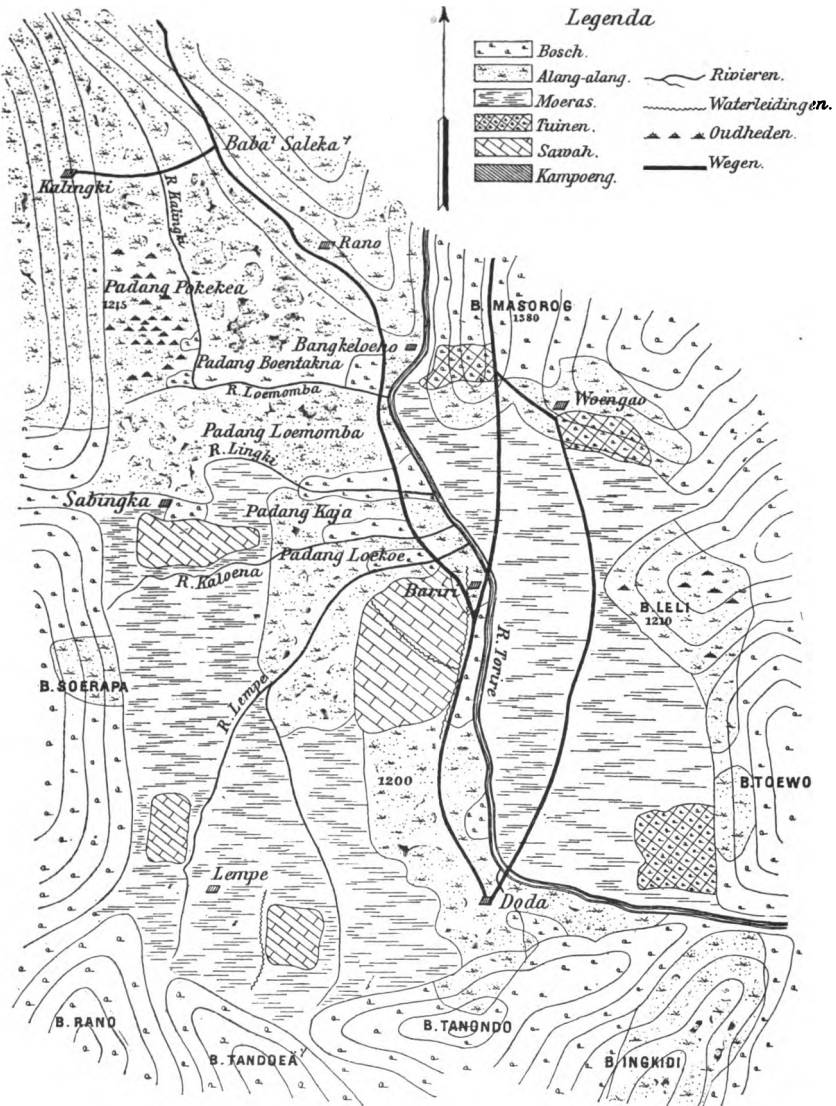
natives call the statue *W a t o e m i a n g k a*, i. e. "over eind staande steen." KILIAAN's measurements do not tally with his figure, nor with the measurements I took of the image in 1918, nor does it represent a woman. I shall come back to this image later on. KILIAAN says the *W a t o e m i a n g k a* faces north, and that, leaning against its left side, there are three narrow stones, about 20—30 centimetres high. He made inquiries about the stone image, but the natives said they did not know who made it, but there was a legend about it which KILIAAN quotes. "Once there was a wife who committed adultery with her husband's brother. They were caught, and the man was flogged. The woman then transformed herself and her children into stone."

Near this image KILIAAN says there are five stone vats each of which is hewn from a single block of stone. The biggest one has a height of 1.75 metre by a diameter of 1.5 metre. The smallest vat has a height of one metre by a diameter of 0.50 metre. All these vats are nicely polished. KILIAAN found four of them filled with earth and flourishing high grass. The fifth vat was upset and partly sunk into the ground. He says the vats are made of a rock he has seen only in the district where the Torire enters the Behoa plain. The natives could not supply any explanation of the origin or the purpose which the vats had served.

The second site in the western part of Behoa, Poda 'mPokékéo, seems to be a big plain grown with alang-alang grass. The name KILIAAN spells in four different ways. Besides Podé in Pokékéo and Poda 'mPokékéo there is also Pada 'mPokekea and in the map Padang Pokekea. KILIAAN found twenty stone vats, big ones as well as small ones, of about the same size as those of Boeloe Lèli. Besides these, he reports four stone covers each fitting a vat. He supplies a detailed description of one of the vats and of the four covers, in some respects not correct, however.

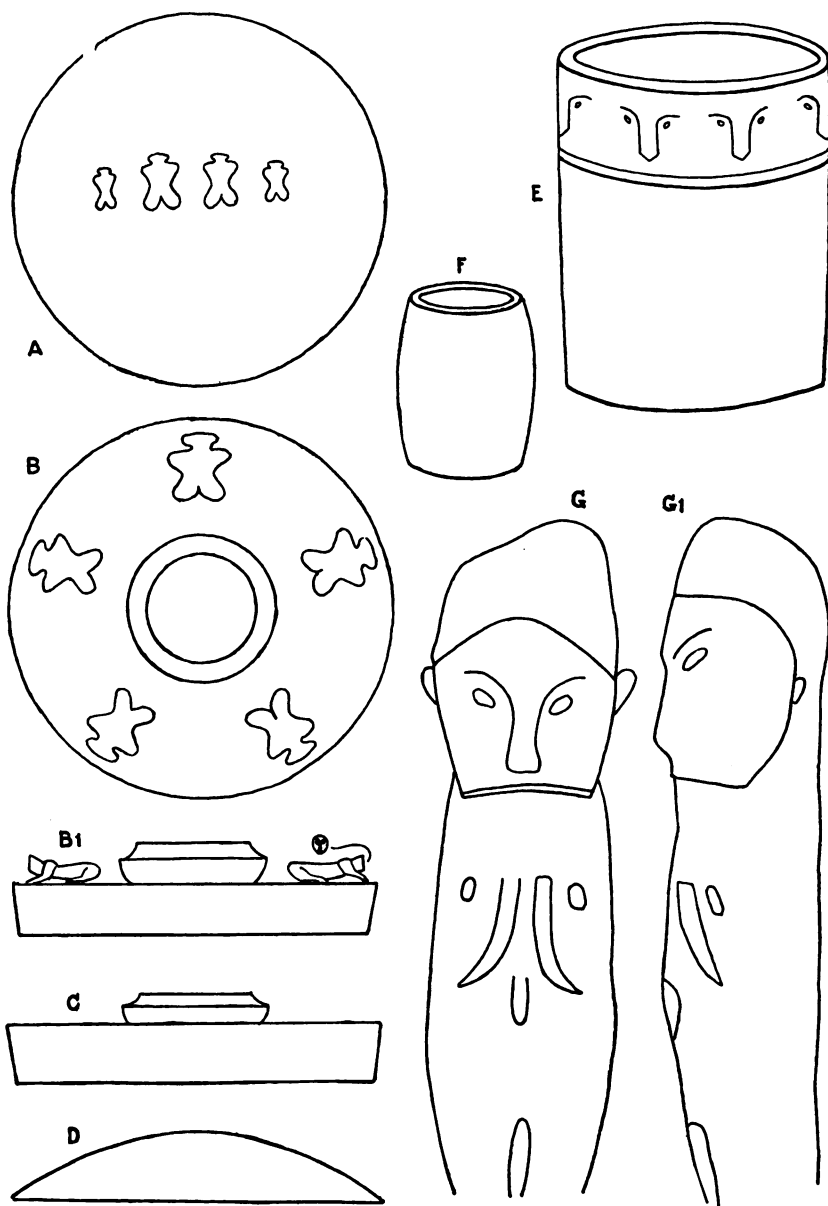
The stone vat he states to be made from limestone. Round its upper part there is a series of six human faces

LANDSCHAP BESOJA



Schaal 1:75000.

Map 7 — KILIAAN's map of 1908 of the district of Behoa.



After KILIAAN

Fig. 24 — Worked stones in Behoa. A—F, from the site of Pada Poke-
kea; G, from Boeloe Léli; A—D, covers for vats; E, F, stone vats; G,
stone image called Watoe miangk a.

in relief. A plump nose merges into eyebrows below which the eyes are seen. Below the faces there is a groove, running in a circle round the vat. This KILIAAN holds to be the joint mouth of the six faces (fig. 24 E).

That this description as well as KILIAAN's representation is faulty we shall see later on. The same is the case in his account of the four stone covers and his representations of them (fig. 24 A—C). He says that two of the covers are decorated with sculptures. They are about 0.2 metre thick by a diameter of 2 metres and consist of a single block of stone. One cover has a central knob, 0.2 metre high by a diameter of 0.4 metre. Round it lie in a circle five dogs (KILIAAN writes "handen," a misprint for honden, dogs), facing the outer edge of the cover. They are of crude execution. The figures lack a head, their neck ending in a plane surface. On this is cut a face in relief, recalling the faces of the vat described above. These animal images are all of the same size (length 0.25 metre by a height of 0.20 metre) and are of a piece with the cover (fig. 24 B, B1).

The second cover is of the same size as the one first described and is also adorned with four dog images, but in this case they lie side by side in a row right across the cover (fig. 24 A). The third cover is, similarly to the one first described, adorned with a central knob (fig. 24 C). The fourth cover has no decoration but is said to be arched (fig. 24 D).

KILIAAN states that at the site of Pada 'mPokekea some of the stone objects are concentrated in a group. There is a group of nine vats in three rows, each with three vats. Close to these, the four covers are found. The remaining eleven vats are scattered round the group of nine vats. Finally he mentions a number of stones, joined so as to form something like a floor, and lying northwest of the group of nine vats.

The same year, 1908, KRUYT, in "Tijdschr. v. Ind. Taal-, Land- en Volkenk." published a short account of his own

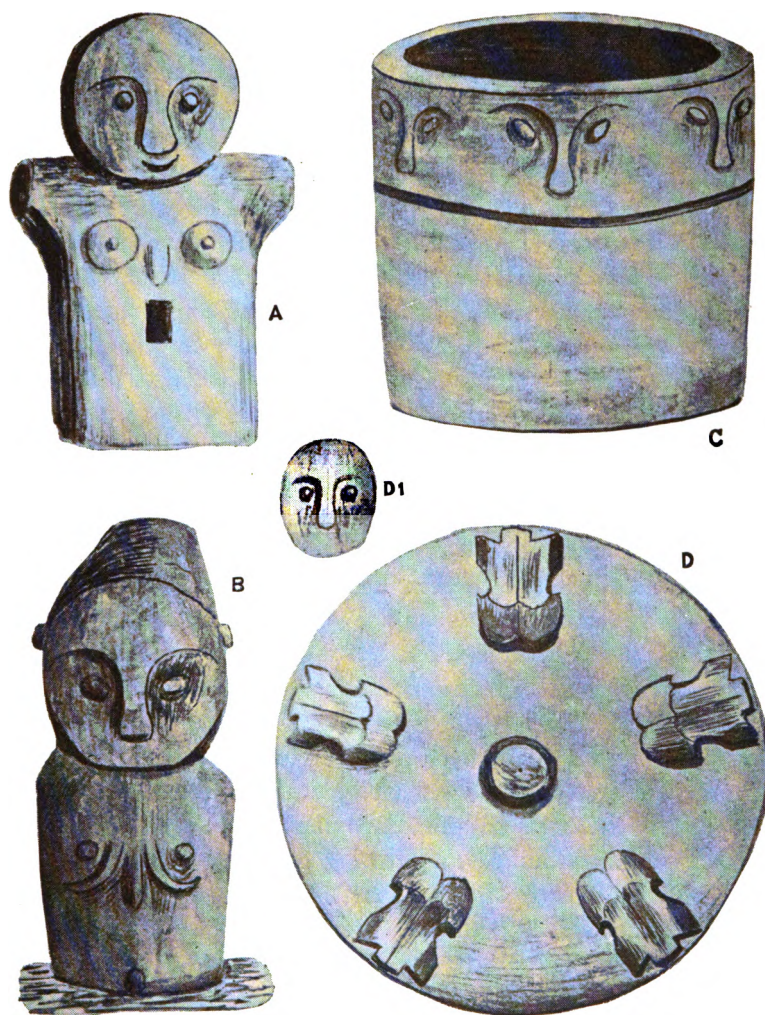
experiences of the ancient monuments of Napoe and Behoa, having been commissioned to do so by the Bataviaasch Genootschap. In his paper KRUYT corrected some of KILIAAN's mistakes and records several stones from Behoa which KILIAAN had not seen.

From the site of the former village of Ponga, KRUYT records three stone vats, and from the former village of Bangkélóeho another one. At the site of Pada 'mpokékéa he discovered three fallen stone images of about the same size as the one from Boeleoe Lèli, recorded by KILIAAN. One of the three images represents a woman. From the natives KRUYT failed to learn anything about the origin and meaning of the stone objects. What they told him about them was nothing that could help him to reveal the mystery enveloping them.

KRUYT says it is typical of the stone images that those representing men have Chinese eyes, those representing women round eyes. Of the image at Boeleoe Lèli, by the natives called Tadoelako ("voorganger in den oorlog"), he says it is impossible that it represents a man. He is of the opinion that the stone vats have not been used for sepulchral purposes. He suggests that they have been water tanks, useful on the occasion of a siege. The sculptures on the stone covers as described by KILIAAN, are according to KRUYT not dogs but monkeys, closely similar to wooden sculptures met with in several native temples. Finally he disputes KILIAAN's statement that the art of stone-cutting still is known by the natives of Behoa. The stone mortars found at some villages are not of recent date according to him.

The same year KRUYT published a more detailed account of the ancient stone monuments in the paper mentioned in the foregoing, called "De berglandschappen Napoe en Besoa in Midden-Celebes," illustrated with two plates and a map (Map 8). This account is in several respects not correct, a fact pointed out by the present author in 1921 in "I Celebes Obygder." On pages 1339—1341 KRUYT

W. Kaudern. 4



After KRUYT

Fig. 25 — Worked stones in Behoa. A, C, D, from Pada Pokekea; B, near Boeloe Lèli.

representing a mouth for all six faces. This *k a l a m b a* he illustrates by a figure (fig. 25 C).

In 1921 the present author in "I Celebes Obygder" pointed out that the statement about six faces in relief on the stone vat in question certainly is an error. KRUYT has seen the vat, but evidently not examined it closely, or he would have noticed that KILIAAN's statement of its six faces is not correct. As a matter of fact they are eight in number. What KILIAAN, and after him KRUYT, calls a mouth, is but a line, separating the ornamented upper part of the vat from the lower, not ornamented part. The top of the vat is divided into eight fields by eight vertical grooves.

According to KRUYT the height of this vat is 1.90 metres, by a circumference of 7 metres. Its wall is 20 centimetres thick.

His account of the stone covers is here more detailed than in his first paper on the same subject, but to a large extent he seems to have copied KILIAAN. He says that on the ground he found three stone covers, evidently removed from their original places on top of the vats. These covers are 18—20 centimetres thick by a diameter of 1.90 metre. One cover has a central knob for its single ornament, the other two covers have respectively five and four monkey images. On the cover with five images, these lie in a circle, the four figures of the other cover are in a row right across the cover. KRUYT supplies two illustrations of the cover with five animal images, a drawing of his own, showing the whole of the cover, and KILIAAN's transverse section of it. He also reproduces KILIAAN's representation of the cover with four images.

KRUYT's representation of the cover with five images (fig. 25 D) does not tally with KILIAAN's (fig. 24 B, B 1), a matter commented upon in a foot note on page 1340 by the editors of the periodical. The size of the images and the central knob, as well as the shape of the latter in KRUYT's figure deviates from KILIAAN's figure.

KRUYT says that of the four images lying in a row, the two on the flanks are smaller than those in the middle, altogether in keeping with KILIAAN's representation of the cover. Unfortunately KILIAAN's figure as well as KRUYT's statement are not correct as will be seen in fig. 158, Vol. I of "I Celebes Obygder," by the present author. Only the animal on the left flank is smaller than the rest, all of which are of about the same size, a fact also confirmed by RAVEN's photograph of this cover from 1917.

A fourth cover from the same site KRUYT does not mention, but he says there is a big oval slab of stone, 2.20 metres long, 1.90 metre broad and 30 centimetres thick. Like a low table, but perforated in its center, it rested on a number of smaller stones. In a foot note on page 1340, the editors point out that this recalls a dolmen: "Dus blijkbaar hunnebedachtig, m. a. w. als graf-bedekking."

From the site of Pada mPokekea, KRUYT also records three stone statues, all lying on the ground, presumably fallen over. Two of these images represent men, the third a woman. Of the latter, the height of which is 1.60 metre by a shoulder breadth of 50 centimetres, he supplies an illustration (fig. 25 A), not correct, however, since the width of the image is about two-thirds of its height. Finally he reports from this site two stones with hollows, 5 centimetres deep by a diameter of 8 centimetres.

Some distance from Pada mPokekea KRUYT saw the remnants of an old bank of earth, grown over with bamboo, indicating the site of Ponga, a village long ago abandoned by its inhabitants. Outside the bank, there were three vats at a distance of about 40—50 metres from one another. He also mentions a stone vat from the abandoned village of Bangke loeho.

From the site of Boelèli (= Boeloe Lèli), KRUYT records four stone vats on the hill. Below these, near the plain, there is a stone image, a man KRUYT says this time, facing north. The natives call it Tadoelako, "voorvechter," (fig. 25 B).

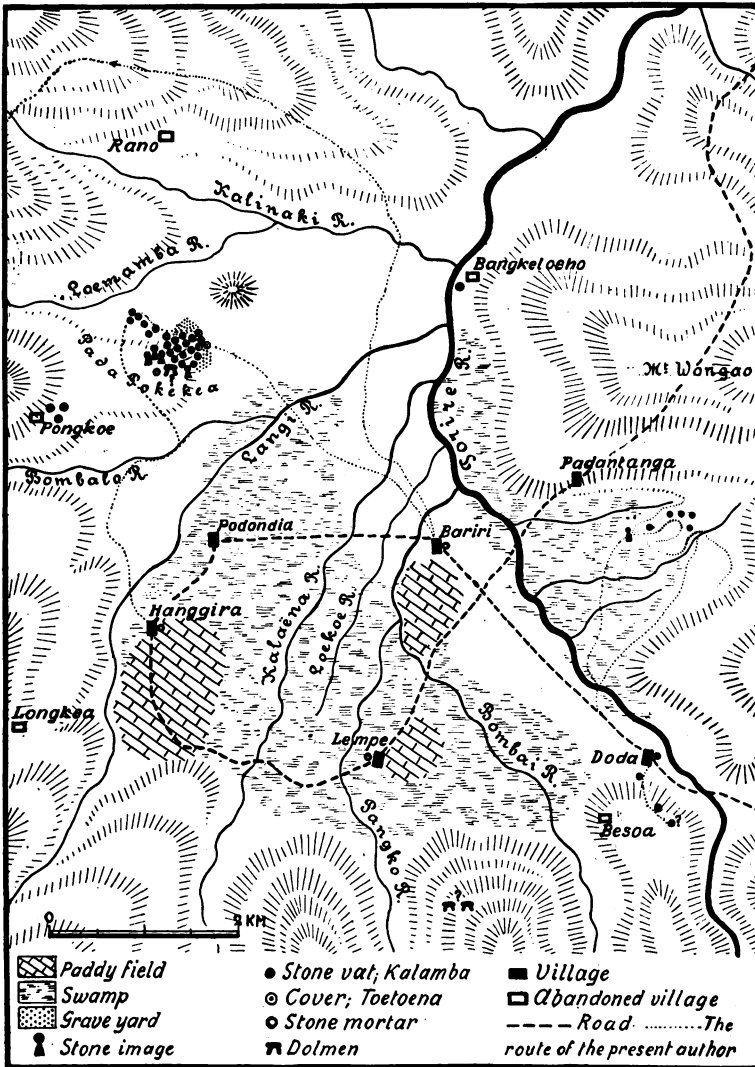
Not far from this image there is a stone vat, turned over. In it KRUYT found a shelf, a feature not known from any other *k a l a m b a* in Behoa, but recalling the shelf of the large oval stone tub in Napoe called the "bath place of a prince." The shelf of the Besoa vat was slightly concave.

At each of the villages of Doda and Hanggira he saw a hollow stone, presumably this means a *w a t o e n o n d j o e*, or *n o n d j o e d j i*, because he says they were the same kind as those he and ADRIANI had seen at the village of Watoenondjoe, Sigi district.

Some years later, in 1910, the two Dutch missionaries SCHUYT and TEN KATE visited Napoe, Behoa, and Bada. In his report, "Van dag tot dag op een reis naar de landschappen Napoe, Besoa en Bada," published in "Mededeel. v. w. het Nederl. Zendeling-Gen.," Jaarg. LV. Rotterdam 1911, SCHUYT gives an account of the ancient monuments they saw in Behoa. At the village of Doda, he says, there are strange ancient stones, the origin of which is unknown to the natives who used them as a bedding for the poles of their huts, by which they had been severely damaged. These stones had a smooth central hollow, recalling that of the wooden rice mortars of the district. Some of these mortars having level edges, SCHUYT suggests they have been used as grinding stones, but they may just as likely be mortars, he adds.

Not far from Doda there is a round vat of granite. SCHUYT says it must have been formed from a huge block of stone. Its inner diameter is ± 1.2 metre, its wall 10 centimetres thick, its depth ± 1.5 metre.

From Doda the two missionaries went on to Lempe, a village farther to the west. Near the village they climbed a hill where they had been told they would see some ancient stones. Of these they write as follows, p. 16: "Toen we eindelijk de bedoelde hoogte hadden beklommen en de twee groote steenen, die als hunnebedden op kleinere steenen zijn gelegd, hadden bezichtigd,"



Map 9 — Behoa. On this map, based on KRUVT's Schetskaart van Midden-Celebes, the present author has tried to give the sites of the prehistoric stone objects of the district.

A



B



KAUDERN photo 1918

RAVEN photo 1917

Fig. 26 — Front and side views of the image called Tadoelako at Boeloe Léli, north of Doda, Behoa.

GRUBAUER in 1911 passed through Behoa, but he does not seem to know anything about the ancient monuments of the district.

In 1917 RAVEN visited Behoa. His account of the antiquities he saw in Napoe and Behoa, published in 1926, I have mentioned in the foregoing when speaking of Napoe. I shall come back to it later on in this chapter.

In 1918 KRUYT again stayed for some time in Behoa to study the stone monuments. As far as I am aware he did not give an account of his researches until 1932.



Fig. 27 — The same image as in fig. 26. Diagram showing details of the front of the image. Behoa.

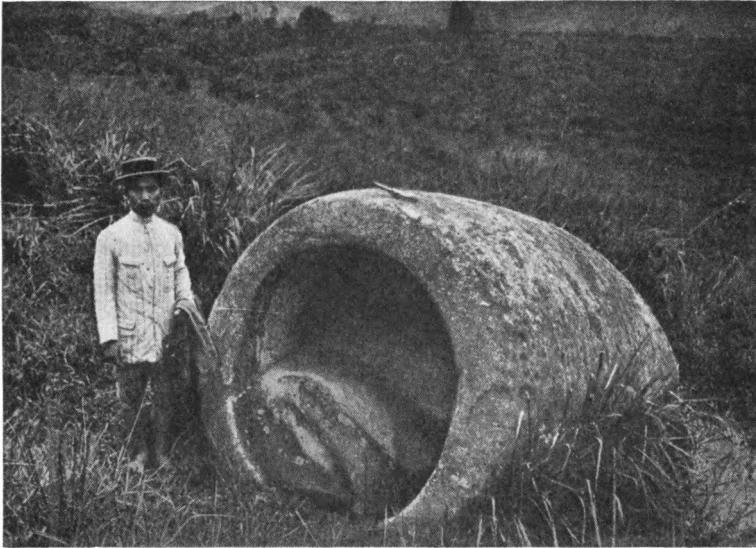
Towards the end of 1918, the present author visited Behoa. In 1921 an account of the results of this visit was given in "I Celebes Obygder," Vol. I, p. 488—501, 503, and Vol. II, p. 124—147. This book, because of its being written in Swedish, is not much known beyond Sweden. Here I shall give a translation, corrected in some respects, and with the addition of some data, not given in the Swedish text.

My sojourn in Behoa was but a short one, 13th—16th of December 1918. On the 14th I visited the site northeast of Doda where the stone image, as well as some *k a l a m b a*, recorded by KILIAAN and KRUYT are to be found.

My guide was an old man. We crossed the plain northeast of Doda, waded through a couple of brooks, passed through banana gardens, pushed our way through bamboo thickets, balanced on the narrow banks of earth, surrounding the paddy fields, and finally were on a quagmire. After having waded through water and mud for a while we reached firm ground (Map 9).

From the foot of Boeloe Lèli in the east, a plateau, ending in several tongues, gently slopes towards the plain. From the quagmire we mounted the point of one of these tongues, and there I had before me a stone image, nearly 190 centimetres high, facing north with a deviation of only 4° towards the west. It was the statue called *W a t o e M i a n g k a* by KILIAAN, *T a d o e l a k o* by KRUYT, *T a d o e l a k o e* by RAVEN. As will be seen in the photographs (fig. 26 A and B) and my drawing (fig. 27), this image is rather clumsy. Its head is too big, its chin broad and square. Above its forehead is a shallow groove, slightly arched, perhaps suggesting the roots of the hair. The crown of the head is damaged, presumably weathered. Two bumps, one on either side of the head, represent ears, but their lower margin is level with the eyebrows. Eyes, oval and slanting, eyebrows, and a nose are sculptured in low relief. The image lacks a mouth. Its neck is narrower than the head, but the body is not much wider than the neck. There is, however, a slight suggestion of shoulders. Arms in low relief are seen on either side of the body, and hands with fingers rest in front of it. On the chest are nipples in low relief together with two curved ornaments, broad in their upper part and merging imperceptibly into the body, pointed in their other end and likewise sinking into the surface of the body. Between the two arches is an odd, narrow, straight

ornament. Its upper part lacks a bordering line (figs. 26 A and 27). The hands of the image were partly hidden by earth which I removed to see them properly. I then discovered between them in relatively high relief male genitals: a penis facing the head and under it the two testicles (fig. 27). Thus it cannot be doubted that this image represents



RAVEN photo 1917

Fig. 28 — Fallen stone vat, near the image Tadoelako. Behoa.

a man. It was impossible to ascertain what the ornament on the man's chest meant, or who had made the image.

Higher up on the same plateau, not far from the stone image, I found a rather big *kalamba* (fig. 28) lying turned over on the ground, evidently the specimen recorded by KILIAAN as well as by KRUYT. I measured it. It is about 160 centimetres high. The total diameter is 175 centimetres, its aperture has a diameter of 122 centimetres, its depth is about 107 centimetres. Its bottom has the

shape of a bowl, and on one side where the wall is thicker, there is a slightly hollow shelf (fig. 30 A, A 1).

From this *k a l a m b a* the path running along the tongue of land, rose towards a thicket of bushes. Having passed this, we had before us a file of three rather large *k a l a m b a*. The interspace between them is about 100 metres. On a lower plateau to the southwest of the uppermost *k a l a m b a* stands a fourth *k a l a m b a*.

The native teacher of Doda had told me that at least seven or eight *k a l a m b a* were found at this site, but my sulky guide said there were no more than the five I had seen.

The first of the four *k a l a m b a* standing upright, measures above the ground about 97 centimetres. The lower part of it is sunk into the ground. Its inner diameter is 145 centimetres, the thickness of the wall at the aperture about 23 centimetres which makes a total diameter of 181 centimetres. The depth is 135 centimetres. Its outside has a series of transversal rings, making the *k a l a m b a* look like a barrel with its hoops. In RAVEN's photograph of one of the *k a l a m b a* from this site, these rings can be observed (fig. 29). I have noted one ribbed vat from this site, thus in all probability RAVEN's photograph represents the *k a l a m b a* described above.

The ribs are in rather good condition although the *k a l a m b a* is weather-worn and scaling off (see fig. 29). The top hoop runs 16 centimetres below the rim of the vat, between it and the following hoop the distance is 18 centimetres, between the second and the third hoop 21 centimetres, between the third and the fourth 22 centimetres, and between the fourth and the fifth about 20 centimetres.

The second *k a l a m b a* of the row has a height above the ground of about 150 centimetres by an inner depth of about 103 centimetres.¹ Its inner diameter is at the aperture

¹ 130 centimetres, as given in "I Celebes Obygder," is a misprint for 103 centimetres.

88 centimetres, the thickness of the wall 15 centimetres, making a total diameter of about 118 centimetres. Half way between the rim and the bottom the wall will be about 30 centimetres.

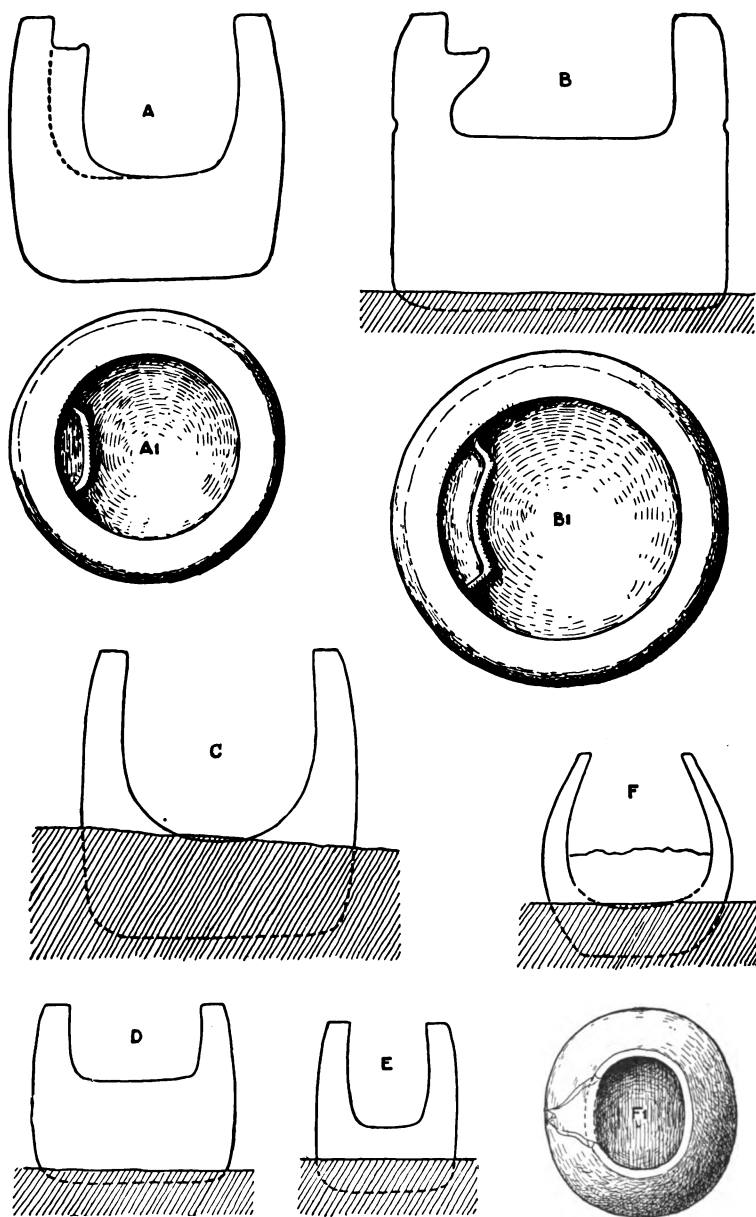


RAVEN photo 1917

Fig. 29 — The first of the four stone vats, standing upright, near the statue Tadoelako. Behoa.

The height above the ground of the third *kalamba* is 120—130 centimetres. Its inner depth is about 125 centimetres, its bottom is a nicely made, smooth bowl. This vat has not a circular section but is slightly elliptical, its axes being 125 and 115 centimetres. The walls are at the aperture 16 to 20 centimetres thick (fig. 30 C).

Since my guide refused to show me anything more at

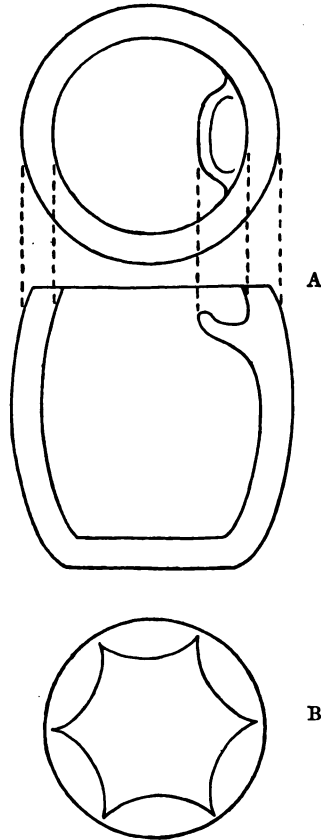


I: 50

Fig. 30 — Diagrams showing some stone vats in Behoa. A, A¹, vat fallen over, near the image T a d o e l a k o; B, B¹, large vat with eight faces, Pada Pokekea; C, stone vat number four, counting from T a d o e l a k o; D, stone vat near the large one with eight faces; E, small vat not far from the large one with eight faces; F, F¹, barrel shaped vat. Pada Pokekea.

this site, and since I was unable to discover anything of interest myself, I had to return to Doda. I had been told that south of the village, on a small hill, there was a *k a l a m b a*, and to this my guide took me. It proved to be a big specimen, fallen over and looking rather the worse for weathering. Its height above the ground is 150—160 centimetres,¹ the depth of its hollow 82—85 centimetres its inner diameter at the aperture 87 centimetres, its wall at the margin 13—15 centimetres, its total diameter 115 centimetres. This *k a l a m b a* is formed from some rock containing a mineral with big crystal surfaces.

The following day I continued my search in the neighbourhood of Doda. Accompanied by the native teacher I started for a ridge almost due southeast of the village, on the summit of which the teacher knew there were a couple of ancient stones. He found them after some hunting. One is a *k a l a m b a*, 170 centimetres high, with an inner diameter of 105 centimetres. Its wall is at the aperture 20 centimetres thick, the total diameter about



After RAVEN

Fig. 31 — A, diagram of the stone vat pictured in fig. 28, showing the concave shelf on the inside, a few inches below its rim; B, diagram of the bottom of the vat, to illustrate how the edge is bevelled off hexagonally.

¹ In "I Celebes Obygder" the medium hight, 155 centimetres, is given.

145 centimetres. Not far from the *k a l a m b a* there is a stone which may be a piece of a broken vat (fig. 32). It is 105 centimetres high, 80 centimetres broad at the bottom, and rather flat. On it is seen a curved figure with its points turned downwards. The natives considered this figure the horns of a buffalo. At the foot of the big stone lay a small one, which the natives called its child. But all this was



Fig. 32 — Block of stone with "buffalo horns." Near Doda, Behoa.

mere fancies. Weathering had made the small stone come loose from the big block. It exactly fits in with it and makes the "horns" disappear.

The following day, the 15th, I intended to visit the site of Pada Pokekea to see the ancient monuments recorded by KILIAAN and KRUYT. An old native of the village seemed to know the site very well. He said there were no less than nine stone images. When I suggested he should take me to see them he refused to do so, and no offer of money could

make him change his mind. I had to put up with the company of a young man who had not yet seen the stones himself, and a younger brother of the teacher's.

Having passed through the villages of Bariri, Podondia, and Sangira, or Hanggira, we had to cross big swamps on buffalo trails (Map 9). At last we reached harder ground and at the same time our destination. We soon found a group of three *k a l a m b a*, one of which is a very big

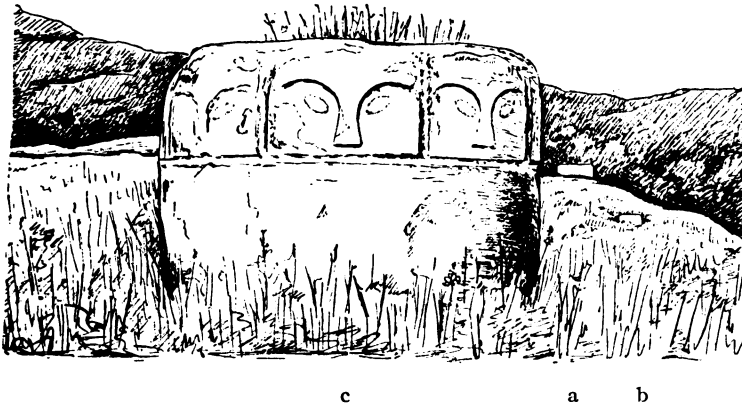


Fig. 33 — Three stone vats. Pada Pokekea, Behoa; *a*, the largest one of a group of three vats; *b*, vat, twenty paces southeast of the large one; a diagram of it is shown in fig. 30 E; *c*, the largest vat in Behoa, the one with eight faces.

specimen (fig. 33 *a*). At a distance of twentyfive paces towards the southeast there is a small *k a l a m b a* (figs. 30 E, 33 *b*). Its height above the ground is 90 centimetres, its inner diameter 45 to 50 centimetres. Its hollow is about 70 centimetres deep. Its walls at the aperture are about 15 centimetres thick,¹ giving a total diameter of 75 to 80 centimetres.

In about the same direction, i. e. southeast, at a distance of fifteen paces, two more *k a l a m b a* are found. One is

¹ 25 centimetres, as given in "I Celebes Obygder," Vol. I. p. 403, is a misprint. The table on p. 144, Vol. II has the correct figure.

a very large specimen and has outside round its upper edge eight human faces in relief (figs. 30 B, Br, 33 c, 34 a, 35 a). Its height above the ground is 185 to 190 centimetres, its circumference in the middle 7 metres, its wall is at the aperture about 25 to 30 centimetres thick, its hollow 80 centimetres deep. Inside, 25 centimetres below its rim,

b

a



KAUDERN photo 1918

Fig. 34 — Two stone vats. Pada Pokekea, Behoa; *a*, the large vat with eight faces; *b*, the vat shown in fig. 35 and in the diagram 30 D.

there is a shelf, 25 centimetres broad, 69 centimetres long, of the shape of a bowl. It faces south. When I saw the *k a l a m b a* it was filled with earth and water.

At a distance of 70 centimetres from the rim of the vat runs a groove, 7 to 8 centimetres broad, connected with it by eight vertical grooves of the same breadth as the circular groove. In each of the eight sections, which measure 70×80 centimetres, there is a human face in relief: that is to say, a nose with a square tip, and its root merging into

the eyebrows. Below these are oval slanting eyes in relief. The images lack a mouth as well as ears.

The *k a l a m b a* in front of me was so different from the one described by KILIAAN and KRUYT from this site (figs. 24 E, 25 C), that I doubted it was the one they had seen. Could there be another *k a l a m b a* with

a

b



RAVEN photo 1917.

Fig. 35 — The same vats as in fig. 34.

six faces, at the same site? The natives said there was not, and Dr. KRUYT, when questioned about the matter, told me in a letter he made a mistake about the number of the faces.

The smaller *k a l a m b a* (figs. 30 D, 34 b, 35 b) is 110 centimetres high above the ground with an inner diameter of 87 centimetres. Its wall is at the aperture 15 centimetres thick and its total diameter about 117 centimetres.

About 200 metres southeast of the group of three *k a l a m b a* I saw on the top of a small elevation in the ground

a group of eleven *k a l a m b a*, as well as four stone covers, *t o e t o e n a*, as the natives call them. All covers are lying on the ground, and one of them is turned upside down. Near the covers are four *k a l a m b a* in a group and not far from them a *k a l a m b a*, slightly tilted (left corner below of fig. 36; and fig. 38). Near this one are two *k a l a m b a*. The rest are irregularly scattered over the site.

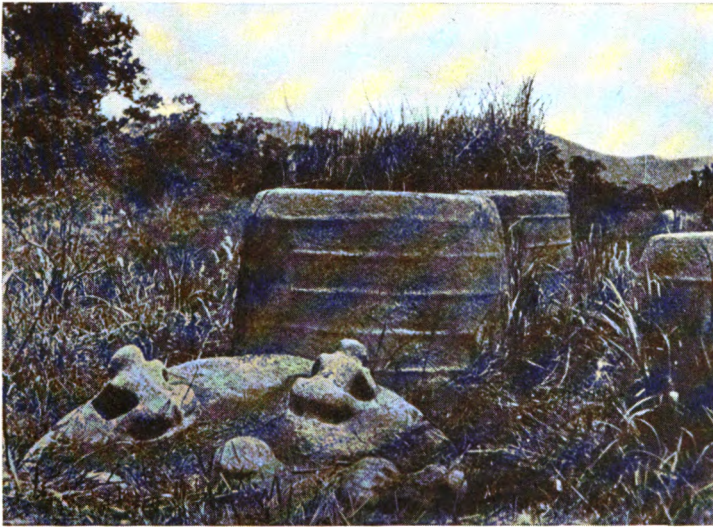


Fig. 36 — Stone vats. Pada Pokekea, Behoa. The one leaning over, seen in the left corner below, is the same one as seen to the right in fig. 38. The cover with five animal images is seen on the ground below the vat in the middle.

The majority of these vats are of about the same size as will be seen in fig. 36, and are ribbed like the specimen northeast of Doda (fig. 37), described and figured in the foregoing. One *k a l a m b a* is remarkably small and has the shape of a barrel (fig. 30 F, F 1). Its height above the ground is one metre, its inner diameters at the aperture 60×70 centimetres which means that it is oval. The rim is partly damaged. The wall at the rim is six centimetres thick, lower

down it is about twelve centimetres. This *k a l a m b a* is not ribbed. I could not ascertain how deep it is, because it was filled with earth and stones which my native companions said must not be removed.

The four stone covers evidently are those first described by KILIAAN, although his data in some respects differ from mine. Three of them were partly covered with earth, which



RAVEN photo 1917

Fig. 37 — The same group of vats as in fig. 36.

prevented me from examining them properly. The natives would not allow me to clear away the earth on top of them. The fourth cover lay upside down (fig. 43). On two of the covers there are conventionalized animal images of excellent execution. The natives said the animals represented monkeys. On one cover these images are ranged in a row right across the cover (fig. 39), on the other they radiate round a central knob (fig. 40). When I saw the latter cover, only three whole figures and half of a fourth were visible. Whether the images were five or four seemed doubtful to me. If they

were five, the interspace could hardly be the same between them, if they were four in number one interspace necessarily would be rather large. I was inclined to believe there were only four figures, but KRUYT, who visited the site later, told me in a letter that they are five and equidistant from each other.



RAVEN photo 1917

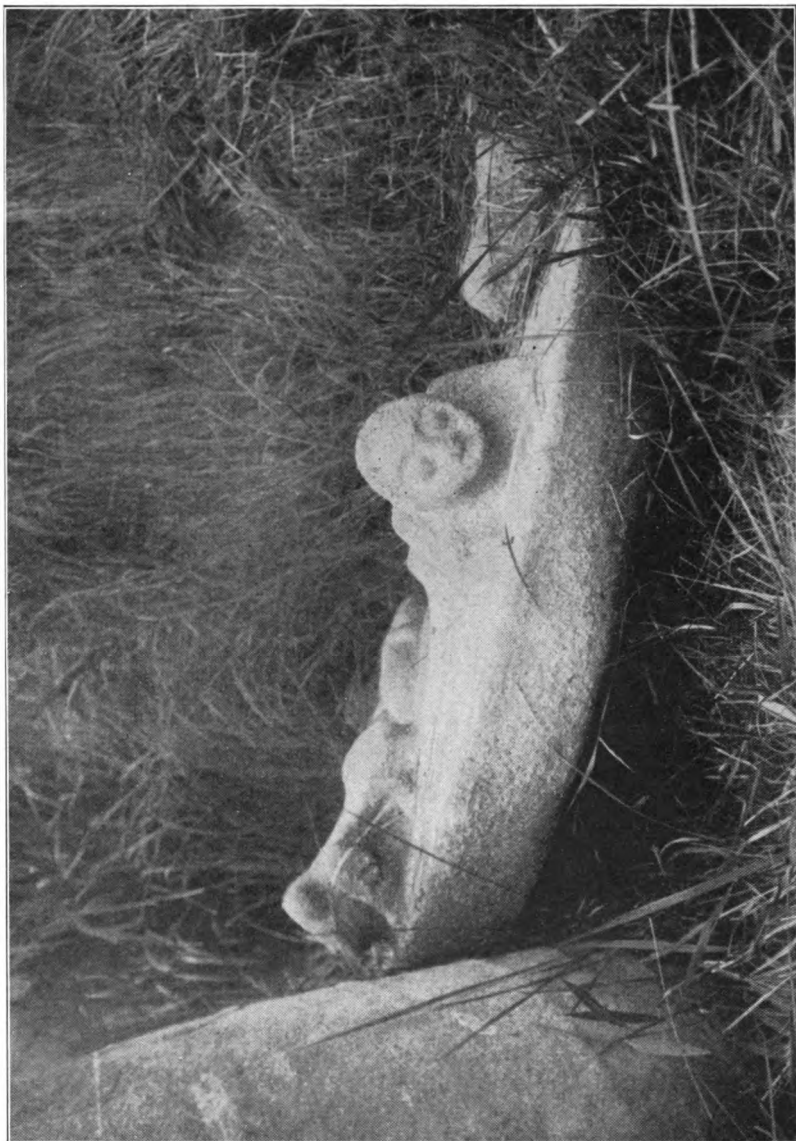
Fig. 38 — Stone vats. Pada Pokekea, Behoa.

As to the cover with four images in a row, I have in the foregoing commented on KILIAAN's representation of it in which the figures on the flanks are smaller than the two in the middle (fig. 24 A). This is a mistake, only the image on the left flank being smaller than the rest (fig. 39).

The third cover, the main part of which is hidden by earth, has the shape of a low calotte. According to KILIAAN and KRUYT, as well as the natives, it is plain, without any kind of decoration. On a close examination I discovered a couple of human faces of strange appearance. Judging by their size and position they seem to belong to a circle of eight



KAUDERN photo 1918
 Fig. 39 — Cover for a stone vat, adorned with four animal images. Pa'a Pakea, Beloa.



KAUDERN photo 1918
Fig. 40 — Cover for a stone vat, adorned with five animal images in a circle. The same as in figs. 36, 37.
Pada Pokekea, Belhoa.

faces (fig. 42). They are not executed in relief, but incised into the stone. As will be seen in figs 41 and 42 these faces are drawn in a peculiar manner, a matter I touched upon in my book "I Celebes Obygder," Vol. II, p. 67, fig. 29: 17. The tip of the nose is square, its root merges into the eyebrows, and these continue into the outline of the face. The eyes are slanting,



KAUDERN photo 1918

Fig. 41 — Cover for a stone vat decorated with a pattern of human faces.
Pada Pokekea, Behoa.

longish and slightly pointed at the corner of the eye. A mouth is indicated by an oval space, enclosed by an incised line. Below the mouth, with its points near the corners of the eyes there is an ornament slightly recalling a pair of horns or a new moon (fig. 42). I suppose this is what KRUYT wrongly calls a moustache, since a moustache is not grown on the chin but on the upper lip.

The fourth cover, lying upside down, exhibited a plane circular surface with a rather carefully made circular groove

running round it at some distance from its edge. As far as I could see, the upper surface of the cover has a central knob of about the same size and shape as that of the cover with five images (fig. 43).

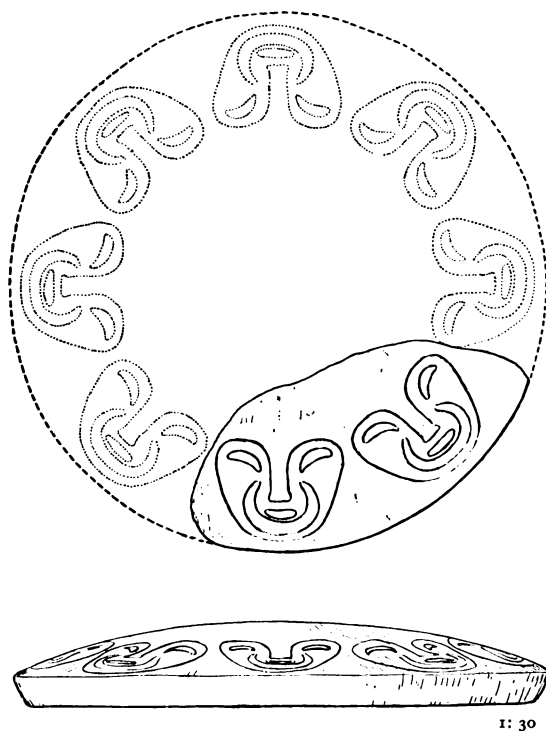


Fig. 42 — Reconstruction of the cover with incised faces shown in fig. 41.
Pada Pokekea, Behoa.

The cover with five images has a diameter of about 185 centimetres, the one with four, a diameter of 240 centimetres, and the one with incised faces presumably a diameter of about 200 centimetres. The size of the cover turned upside down I cannot give. In my table of 1921, I have given a diameter of 150 centimetres, but this is not correct. This figure refers to a cover from Bada to which I shall come back later on.

None of the four above mentioned covers seems to be the fourth of KILIAAN's covers. This, he says, lacks ornaments on its upper surface. In his figure is seen that the edge of the convex cover is thin (fig. 24 D). In all probability it is identical with the cover, convex above, which RAVEN says belongs to one of the smallest *k a l a m b a* (see p. 78).

The slab resting on some smaller stones and having a central perforation, as recorded by KRUYT and said to suggest a dolmen, I did not see.

My companions said there were no stone statues or anything else to see. The three images KRUYT had seen ten

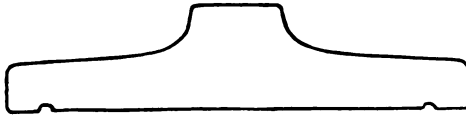


Fig. 43 — Diagram showing a cover lying upside down. Pada Pokekea, Behoa.

years earlier they could not, or would not, show me. I knew there were some more *k a l a m b a* nearer the hills and with my field-glass I discovered two vats. I told my guide of my discovery. He said: "Yes, yes, there are two *k a l a m b a*," but he refused to lead the way to them.

When I left Behoa and passed near the old abandoned village of Pangkeloeho I saw at a distance, on the slope of the hill, a rather large *k a l a m b a*, evidently the one recorded by KRUYT.

At the site of the seventeen *k a l a m b a* and four covers, numerous shards of some kind or coarse earthenware were scattered over the ground.

Of stone mortars I saw but two specimens. One was of common type and served as a support to the steps of the Doda temple (fig. 44). The second mortar had the shape of a cup. It was in the village of Bariri (fig. 56 C). It is 19 centimetres high, 14 centimetres deep, and has a total dia-

meter at the aperture of 28 centimetres. Its inner diameter is 17 centimetres. This mortar was used by a woman to pound some kind of grain, whether rice or maize I could not make out.

RAVEN in his paper of 1926 says he saw at Boeleli, near Doda, the stone statue called Tadoe Lakoe (fig. 26 B), four

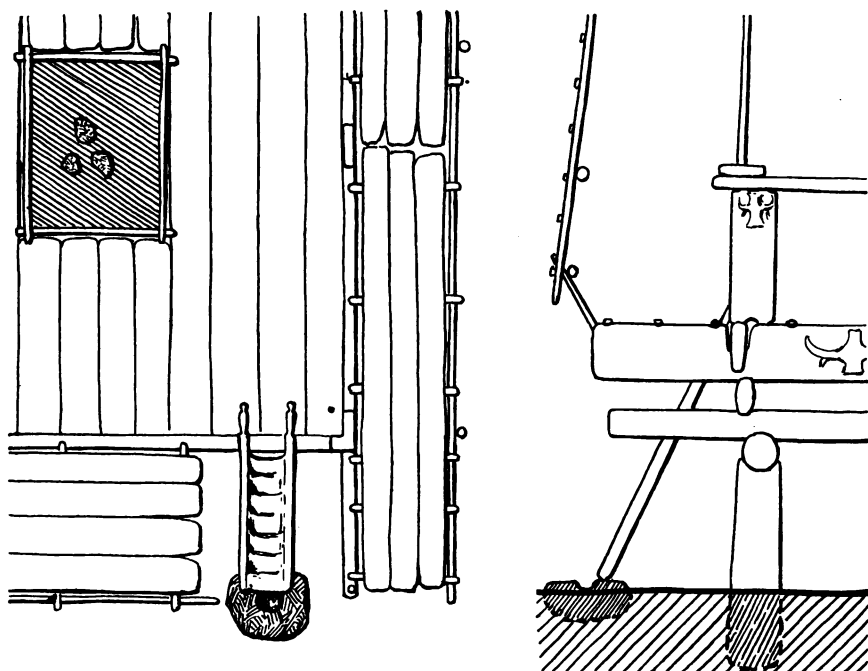


Fig. 44 — Foundation of the Doda temple. A stone mortar is used to support the wooden steps of the entrance.

or five *ka l a m b a* near it, and nineteen *ka l a m b a* and four covers at a place "nearly five miles from Boeleli." His account of the ancient stones of Behoa he illustrates with nine very good photographs and a diagram. Accompanied by an old Behoa man he inspected the stone image Tadoe Lakoe. On p. 274. he writes as follows: "Tadoe Lakoe, it is said, was an ancient local war leader, and the natives believe the image

to be the chieftain himself and not merely a representation of him. The statue stands about seven feet high, is about thirty inches wide, and is made from a single block of granite. The accompanying photographs, showing both front and side views, make detailed description unnecessary but it may be well to call attention to some of the characters which are not so clear, owing to the low relief in which they were executed: (1) the ears are represented by bumps high up on the sides of the head, their lower borders being about the level of the eyebrows; (2) the shoulders, arms, and hands are in low relief, the fingers pressed to the lower abdominal region; (3) the male generative organ in higher relief is upright and to be seen clearly in the profile; (4) the limit of the forehead is marked, evidence that headgear of some sort is represented. The stone of the top of the head, however, appears to be more or less weathered and this may account for part of the asymmetry." . . . "A mouth is not shown in the figures of Bada and Besoa."

Of the four or five *k a l a m b a* located near *T a d o e L a k o e*, one specimen was of special interest. It was lying on its side on the ground (fig. 28). It had a diameter of 5 feet by a height of 6 feet. Of this he says (p. 274): . . . "its peculiar feature was a concave shelf about eight or ten inches wide inside the vat a few inches from the upper rim, as shown in the accompanying photograph and diagram."

RAVEN's diagram (fig. 31), however, is not correct. The shelf does not project from the wall as shown in the diagram, nor is its hollow so deep as given by RAVEN (compare fig. 30 A, A 1). In all other respects my own data tally with RAVEN's, but he has seen something nobody before him noticed: "The bottom of the vat outside was flat, with the edge bevelled off hexagonally." This he illustrates by a diagram (fig. 31).

Of the other *k a l a m b a* in this part of Behoa he says they have, as a rule, rings in low relief round their outside. Where such rings were not present he supposed that weather-

ing accounts for their disappearing. On this point I do not agree with him. On the *k a l a m b a* illustrated by RAVEN (fig. 29), these rings are clearly visible even on the most weathered surfaces. Evidently the wall and its rings have in equal degree been subject to weathering.

From the site on the opposite side of the Behoa plain, RAVEN records nineteen stone vats of various sizes. Of the largest specimen which he illustrates, he says "... the largest one standing about seven feet above the ground and measuring more than that in diameter. I dug under the lower edge of this and made certain that it too was bevelled hexagonally below. On this vat, the only one having any ornamentation other than the raised rings, was a series of faces resembling those of the statues and executed in relief around the upper third of the vat. Each of the faces was separated from its neighbor by a shallow vertical groove and the series bounded below by another groove encircling the whole vat."

It is very interesting to learn that the lower edge of this *k a l a m b a*, similarly to the fallen specimen near the Doda statue, is bevelled off hexagonally. The concave shelf inside, is another feature these two *k a l a m b a* have in common.

RAVEN says he emptied some vats but only found "mud and soft earth except in one, in which there were in addition wood ashes and fragments of a clay pot." This is very interesting and seems to confirm the theory that the *k a l a m b a* were connected with the burial of the dead.

A rather small *k a l a m b a* described by RAVEN, is evidently identical with the specimen which I have represented in fig. 30 F. RAVEN says (p. 276): "Near-by was a squat, barrel-like vat much less in diameter at the top than through the middle, which if fitted with this cover would have appeared nearly spherical or at least domelike in side view." Of its cover he says: "The simplest cover, made for one of the small vats, was smooth and flat below, evenly convex above but somewhat weathered, with a thin edge all

round." This description perfectly tallies with a cover from this site, illustrated by KILIAAN. Also KRUYT mentions this cover.

At first, before I had seen RAVEN's paper on the ancient stone monuments in Central Celebes, I thought the cover sketched by KILIAAN and described by KRUYT was identical with the cover with a pattern of conventionalized human faces which I have described on p. 70. In this I was no doubt mistaken. RAVEN states that the cover belongs to one of the smaller *k a l a m b a* and if placed on top of it would make the vat "appear nearly spherical." The cover with the faces, however, seems to be a very large one.

Finally RAVEN describes three more covers, all of about the same size: "... huge stone discs more than six feet in diameter and seven or eight inches in thickness, bevelled so that the diameter above was slightly more than that below." Two of them, he says, were adorned with images representing monkeys; on one they are four in a row, three of which are bigger than the fourth. Of the second cover he says: "The most elaborate cover was also decorated with images of these black monkeys peculiar to Celebes. The figures were well modeled, arranged symmetrically around the periphery (fig. 37), and in the center was a raised circular boss, flattened on top." His representations show that the two covers are identical with those described by KILIAAN, KRUYT, and the present author.

The third of the big covers RAVEN describes as follows: "The simplest of these was decorated in the center with a nicely hewn knob more than a foot in diameter and six inches high." This seems to be the cover which lay upside down when I saw it in December 1918. When RAVEN saw it, it could not very well have been upside down, or he would not have been able to give all the details about the central knob of its upper surface. The cover thus seems to have been turned upside down during the interval between my visit and RAVEN's. It can hardly be the natives themselves who,

on their own accord have engaged in such an enterprise. Even if they do not actually worship the ancient monuments, they no doubt to a certain degree fear them.

KRUYT in his paper of 1932: "L'immigration préhistorique dans les pays des Toradjas occidentaux," treats of the Behoa stone monuments. He says he has seen no less than forty-seven *k a l a m b a*, complete specimens or fragments of vats. Unfortunately nothing is said about the localities where all these are found. He does not describe them but supplies a representation of the fallen *k a l a m b a* near Doda as well as of the large *k a l a m b a* with eight faces. The photograph of the latter has been touched up on its very dark left side, I imagine, and this makes the vat look oval, which it is not. KRUYT has also a representation of the whole plain at Pokekea, and a representation of the *k a l a m b a* group near the cover adorned with five stone images.

KRUYT does not enter upon a close description of the covers. On p. 3, however, he says: "Les yeux du *kalamba* et du couvercle à Pokekea sur lesquels des faces humaines sont taillées, sont tous obliques." This statement evidently refers to the *k a l a m b a* with eight human faces and to the cover ornamented with an incised pattern of strange faces which I discovered in 1918 and have described in the foregoing. I suppose KRUYT's statement on page 2 refers to the same cover: "Un ornement de la figure ressemblant à une moustache, se trouve sur les faces d'un couvercle de *kalamba* à Pokekea en Besoa. . . Les figures à moustache sur le couvercle du *kalamba* ont les yeux obliques."

The stone images in Behoa KRUYT states to be six. He mentions the image *T a d o e l a k o* near Doda, which faces north. From Pokekea he records four images, p. 3: "Des quatre statues rapprochées les unes des autres à Pokekea, une seule a les yeux obliques, tandis que les trois autres ont les yeux ronds." Of the sex of the Behoa images he says on p. 4: "à Besoa l'une des quatre statues à Pokekea et la statue *Tadoulako* près de Doda ont la partie génitale mascu-

line;" When speaking of the directions which the images face KRUYT mentions a specimen from Behoa, called Bouangke which is facing east. Whether this is one of the four statues at Pokekea, or the sixth statue of Behoa cannot be ascertained from the text.

There seems to be one more image which, similarly to T a d o e l a k o, has on his chest an ornament suggesting the horn of a buffalo. KRUYT on p. 4 says: "Sur la poitrine de trois statues d'hommes (une à Napou, deux à Besoa) on a appliqué un ornement qui rappelle le motif des cornes. . ."

Of stone mortars he says only the following, p. 5: "Ça et là nous rencontrons, employée comme pierre de village, une statue de pierre. . . ou un mortier de pierre (Lempe en Besoa)."

B a d a

The two cousins Paul and Fritz SARASIN were the first Europeans who visited Bada on their journey from Paloe to Palopo in 1902. They passed through Gintoe, Badagajang (Badangkaja) and Bangkekae and arrived at Dodoka, but they were not fortunate enough to see any of the ancient stone monuments.

In 1908 KRUYT visited Bada, and in his paper of 1909 gave an account of his journey. In this paper, "Het landschap Bada in Midden-Celebes," published in "Tijdschr. Kon. Nederl. Aardrijksk. Genootschap," he describes a great number of ancient stone monuments, but unfortunately does not supply any representations, nor does he give the sites in his map. The three oldest villages are according to KRUYT Bada-mpoe'oe (Badakaia or Badagajang), Boelili (not to be confounded with Boelëli, or Boeloe Lëli, in Besoa), and Gintoe. The other villages have been founded by people removing from these three. In the old villages KRUYT found ancient stone monuments exactly of the same character as those of Besoa and Napoe.

W. Kaudern. 6

At Gintoe KRUYT saw a stone image sunk so deeply into the ground that only its weathered head was visible. A waringin tree had wound some of its roots round it. A similar image is at Bada-mpoe'oe, KRUYT says. The image in best condition, he saw at the village of Bomba. According to KRUYT it represents a woman. The natives called it *Langke Boelawa*, Golden anklet (*boelawa*, gold *langke*, anklet).

At Boelili KRUYT saw a stone image, the head of which was partly broken. This statue as well as a block of stone near it, were the only stones worshipped by the natives who had surrounded them with a fence. In the enclosure was a small hut for offerings, as well as a garden of holy plants. Joints of bamboo, stuck into the ground, were ladders used by the demons when descending to the earth. The name of the image with a broken head is *Tarairoi*, that of the stone near it of which no particulars are given, *Ngamba*. The only occasion on which the natives brought offerings to these stones was when they were starting their work in the paddy fields. They reckoned this would favour the crops. If the weather was too dry, the natives used to give the stones a chew of betel to get rain. KRUYT says the natives pay no other homage to the images and are not afraid of touching them. The natives of Bada said the statues were there when their ancestors came to Bada and settled in the district.

Besides these images and two stone vats, at the village of Kolori, KRUYT found at Boelili numerous blocks of stone of the rock from which the images are formed. To get them there must have been a difficult work, that kind of rock not being found in the neighbourhood. Among these blocks KRUYT found one with a hollow like that of a common paddy mortar. I suppose this means it was a so-called *watoe nondjoe* or *nondjoe dji*.

Finally KRUYT states that the statues face north. Not having seen the images of Gintoe and Bada mpoe'oe, I cannot

pronounce an opinion on them, but the image at Boelili which I have examined, faces nearly due east. The Bomba image has a deviation from the north of 10° towards the west.

A couple of years later, SCHUYT visited Bada. In his account of this journey, referred to in the foregoing, he mentions the ancient stones of Boelili and the image of Bomba. He says that at Boelili, near one of its temples, is a little hill with numerous big stones, some ornamented with figures. Over one, a little roof was set up and there was a small table on which offerings were laid. It is a pity that SCHUYT has not represented this stone. No other stone with ornaments seems as yet to be recorded except the one figured by GRUBAUER and the present author.

At the foot of this hill SCHUYT saw a large stone image representing a man. Its head was knocked off and lay face downwards on the ground in front of it. He also mentions the stone woman at Bomba. SCHUYT presumes the image was subject to some kind of worship since he found a stick put into the ground with a fluttering strip of bast-cloth fastened to it.

In 1911 GRUBAUER paid a short visit to Bada and two years later, in his book "Unter Kopffjägern in Central-Celebes," he published an account of the stone objects he saw in this district. Of the Bomba image he says on page 512: "Ein gleich rätselhaftes Steingebilde, wie ich es im Watutau gefunden hatte, bildete auch das Wahrzeichen von Bomba, doch zeigte es zum Unterschiede von jenem die Umriss einer weiblichen Figur. Ein davor aufgestelltes Bambustischchen mit reichlichen Opfergaben liess auf höhere Verehrung schliessen." (fig. 52)

Of the stone objects of Boelili, GRUBAUER writes as follows on p. 517: "In dieser Ortschaft fand ich zum drittenmal ein Steinbild vor, dem leider der Kopf abgeschlagen war. Eine Anzahl kleinerer Steine ohne erkennbare Bearbeitung standen im Kreise um dasselbe, — umschlossen

also wohl ein 'simbuang batu,' wie solche Plätze bei den tiefer im Süden wohnenden Toradja genannt werden. Etwas abseits davon lag ein grosser Felsen halb in der Erde vergraben, dem schwer erklärbare Ornamente eingemeisselt waren (fig. 60). Vor einem kleineren, in der Mitte des Dorfes gelegenem Granitblock, war ein Zauber mit dem unvermeidlichen Opfertischchen errichtet. Er bestand aus einem hohen Bambuszweig, dessen Fiedern man mit weissen und schwarzen Hünerefedern und mit geknoteten Fuja-Bändchen über und über behängt hatte. Auf einer Steinbank davor lag ein Bündel geopfertem weissen Fugastoffes."

In 1917 RAVEN visited Bada. As mentioned in the foregoing his account on the stone monuments did not appear until 1926. The following year KRUYT again paid a visit to Bada, but as far as I am aware he has not published his results from this journey. The same year, in November, a Japanese made a tour from Poso by way of Napoe, Behoa, Bada, Gimpoe, and Koelawi to Paloe. What his errand was I do not know, but he seemed to have observed several more stone objects than the earlier visitors of Bada. When I met him in Koelawi he told me about several stone monuments not then recorded in literature. I do not know if he has published any paper on the ancient stone sculptures he saw.

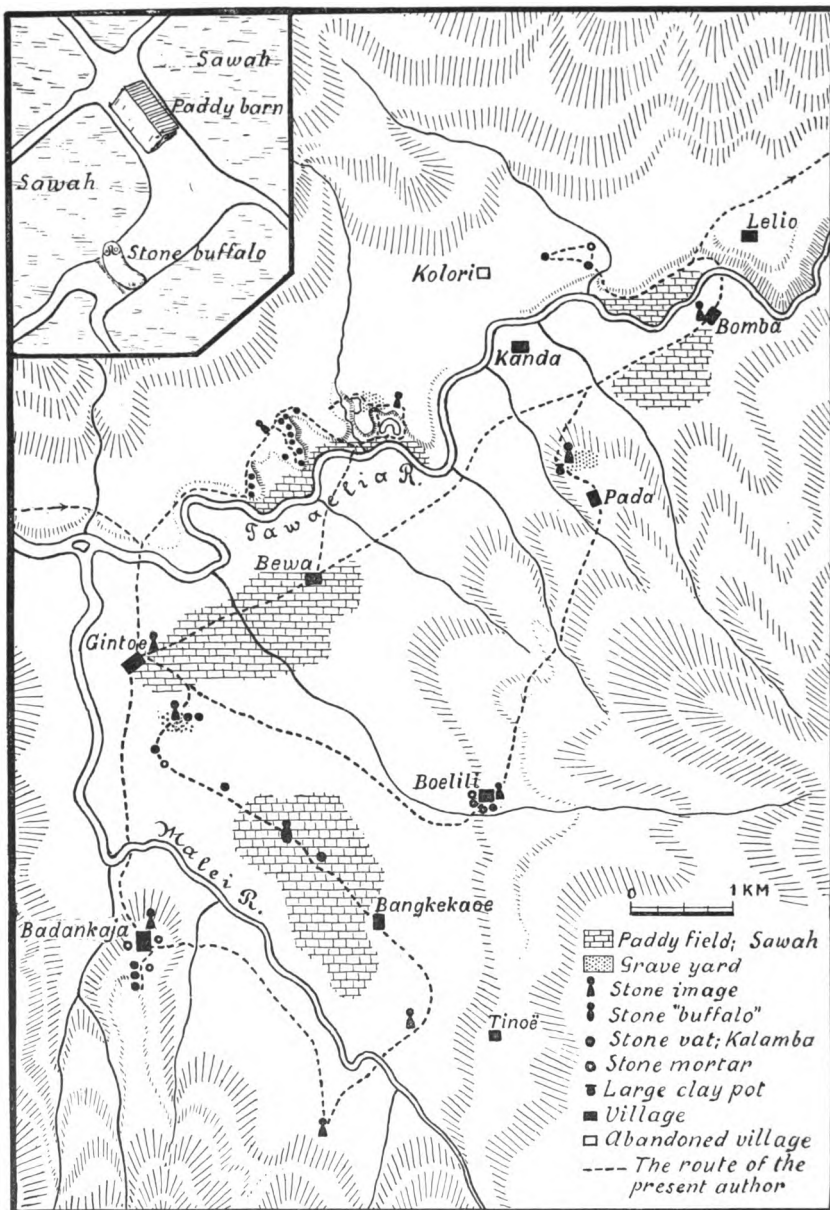
In December 1918 I spent three days in Bada, chiefly to see the stone objects of the district. I arrived on the evening of the 8th of December and left in the morning of the 12th for Behoa. In three days I had the fortune of seeing rather much that was not yet known to science and came to the conclusion that an archaeological research certainly would yield data of great interest about the ancient inhabitants of the country and their culture.

An account of my experiences I published in 1921 in my Swedish book "I Celebes Obygder." In the following a translation of my Swedish text, in some cases amended and expanded, is given.

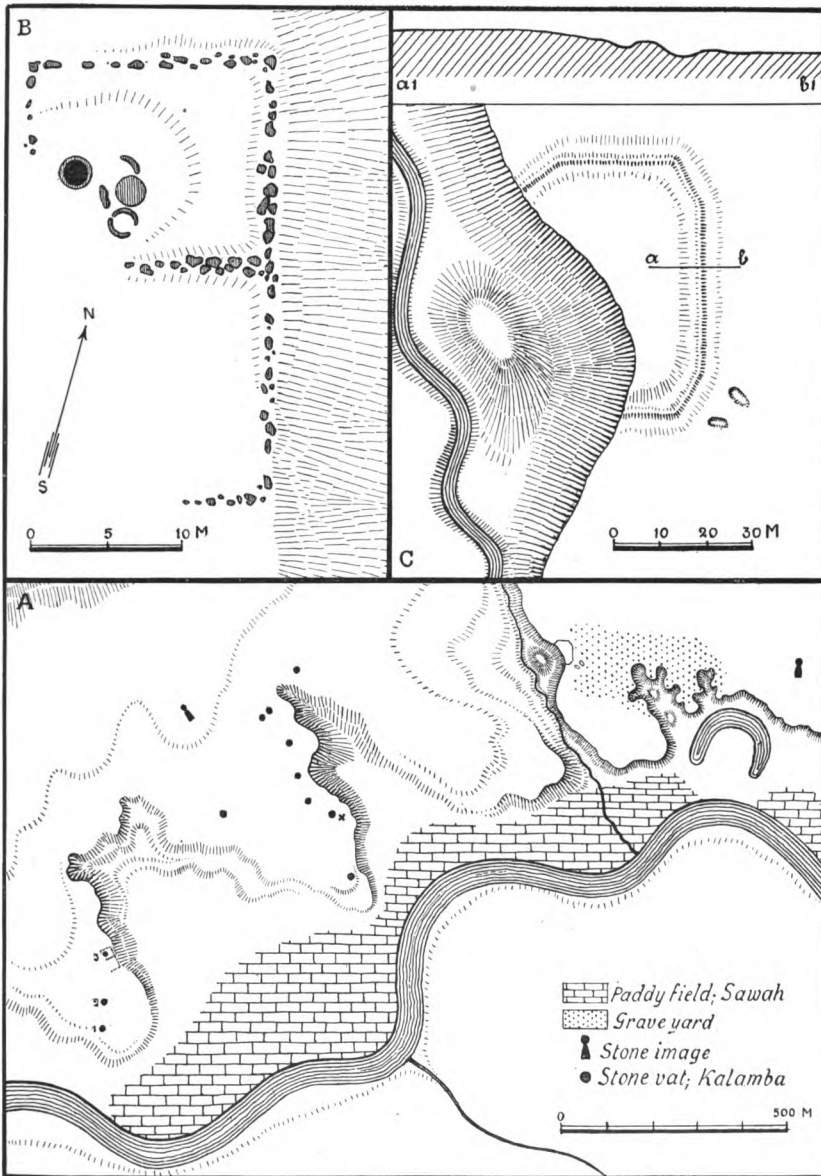
During my visit to Bada I stayed at Gintoe from where I made three long excursions over the whole Bada plain. My first trip was to the part of it on the northern bank of the Tawaelia. It is almost uninhabited at present but a great number of ancient stone monuments are scattered over a large area northeast of Gintoe (Maps 10 and 11) as well as further eastward on the plain on the northern bank of the Tawaelia, making it evident that it has not always been waste land as it is nowadays.

Together with two natives who were to show me the way to the stones, I crossed the Tawaelia in a small craft. After having followed the course of the river eastward, we climbed the river bank and stood on the above mentioned uninhabited plain. It was grown up with grass and gently rose towards the foot of the high mountains in the north. I took a few steps and saw a strange stone ring at my feet. Filled with water as it was, it looked like a well, but on closer inspection it proved to be a stone vat deeply sunk into the ground. Not far from it I discovered a big circular slab of stone, possibly its cover, although it seems to be too big for it. Also in Bada the natives call the stone vats *k a l a m b a*, and their covers, *t o e t o e n a*.

This *k a l a m b a*, No. 1, is not quite circular. Its inner diameters are at the aperture 84 and 89 centimetres. Its wall is 10—15 centimetres thick, its depth 98 centimetres. Its bottom has the shape of a bowl. The hollow of the vat is slightly barrel-shaped (fig. 48 B, B 1). The lower surface of the cover No. 1, seemed to be plane. Its edge, 15 centimetres wide, is bevelled so as to make the diameter above slightly more than that below. The cover has a central flat area, the diameter of which is 66 to 68 centimetres. From this top the cover gently slopes towards its edge. The distance between the central area and the edge is about 69 centimetres. In its center the cover will be about 60 centimetres thick. The *k a l a m b a* as well as the cover seems to be formed from some kind of granite.



Map 10 — Bada. On this map, based on KRUVT's Schetskaart van Midden-Celebes, the present author has added some details referring to the ancient stone objects, especially those on the northern bank of the Tawaelia.



Map 11 — Bada. A, site north of the Tawaelia; B, diagram showing the stone wall almost surrounding a broken vat, No. 3, and its cover (see fig. 47); C, plan and transversal section of an octagonal wall of earth.

I went on with my companions and soon we came upon another *k a l a m b a*, much larger and better worked than No. 1. Like it, this one is sunk into the ground and filled with water with some mud at the bottom. A *t o e t o e n a*



KAUDERN photo 1918

Fig. 45 — Vat No. 2, with its cover, on the northern bank of the Tawaelia, NW of Bewa, Bada. It is also shown on the diagram of fig. 48 A. See Maps 10 and 11 A.

on top of it, covers two thirds of its aperture (figs. 45, 46, 48 A). This *k a l a m b a*, No. 2, has an inner diameter of 140 centimetres. Towards the top its wall grows thinner. Its rim is 18 centimetres broad, the height of the thinner part, 22 centimetres. The cover is a disc with bevelled edge, 32 centimetres thick. Its upper surface rises into a low cone,

the top of which is broken. Originally it may have had a knob or similar ornament. This *k a l a m b a* as well as its cover appears to be formed from some greyish-white granite.

A few paces from this *k a l a m b a* we found a third specimen, No. 3, not deeply sunk but standing almost at the surface of the ground. Since its wall and its cover are broken and fallen to pieces it was impossible fully to ascertain its



After KRUYT

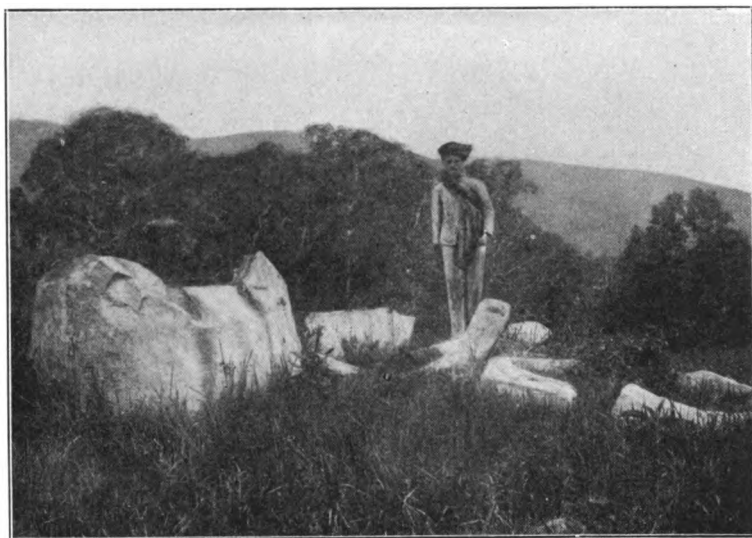
Fig. 46 — The same vat as in fig. 45.

dimension (fig. 47). Its inner diameter at the aperture seems to have been 147 centimetres, the thickness of the wall at the aperture about 34 centimetres. This *k a l a m b a* is close to a ravine and is surrounded by a low wall of round, not worked stones, arranged so as to make a square. Another similar square bordered by stones, is seen in the immediate vicinity of the one enclosing the *k a l a m b a* (Map. II B).

These three *k a l a m b a* are standing almost in a row from north to south with a slight deviation towards the west, about 5° by my compass (Map II A).

We left the tongue of the plain with the three *k a l a m b a* and continued our walk eastward, passing the

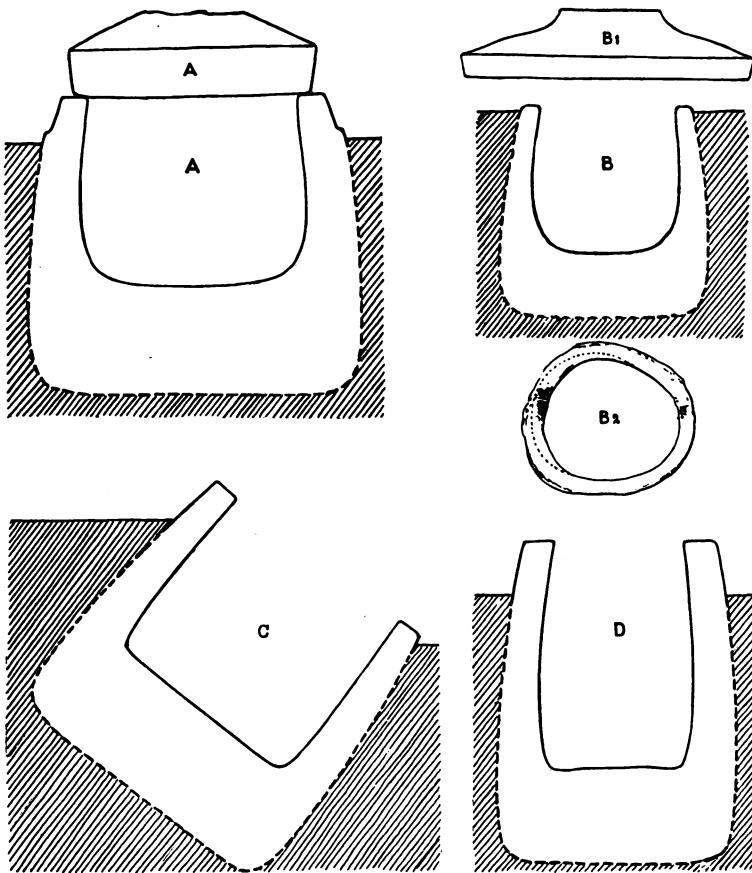
ravine. We reached a second gently sloping tongue of land, (Maps 10 and 11 A) grown over with grass, in the east as well as in the west bordered by rather deep cliffs. Here a great number of *k a l a m b a* are scattered over the plain, all standing rather high on the ground. On the western brink a single specimen stands; close to the eastern brink there are



KAUDERN photo 1918

Fig. 47 — Broken vat located on the northern bank of the Tawaelia, NW of Bewa, Bada. See Maps 10 and 11 A and B.

no less than seven vats. The two farthest to the north are close to one another. One specimen is found a little northeast of the two. All the *k a l a m b a* of this site are relatively large and well worked. I regret not having had time to measure them all. Only one, marked with a cross on Map 11 A, I measured. It stands about 110 centimetres above the ground. The diameter of its aperture is about 155 centimetres. The wall is at the top 18 centimetres thick, increasing in thickness lower down and making the *k a l a m b a* look like a cask. Inside, the wall is nearly straight (fig. 49). The



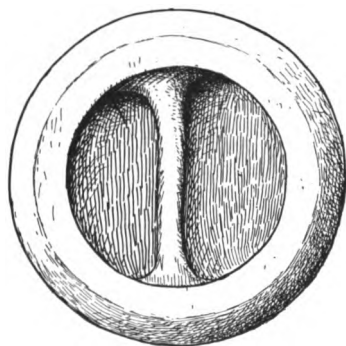
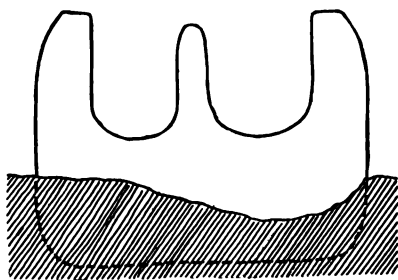
1: 50

Fig. 48 — Diagrams of some stone vats in Bada. A = No. 1; B = No. 2; on the northern bank of the Tawaelia, NW of Bewa; C and D, near Badangkaja; A = figs. 45, 46; D = fig. 67. See Map 11.

bottom is evenly rounded off. The greater part of the hollow is divided by a rather thin stone wall into two partitions, semicircular in transverse section. I have not seen any other *k a l a m b a* with a similar arrangement. In the whole site I could not discover a single cover. It seems all the more strange considering the fact that the three *k a* -

l a m b a on the neighbouring tongue of the plain all have stone covers.

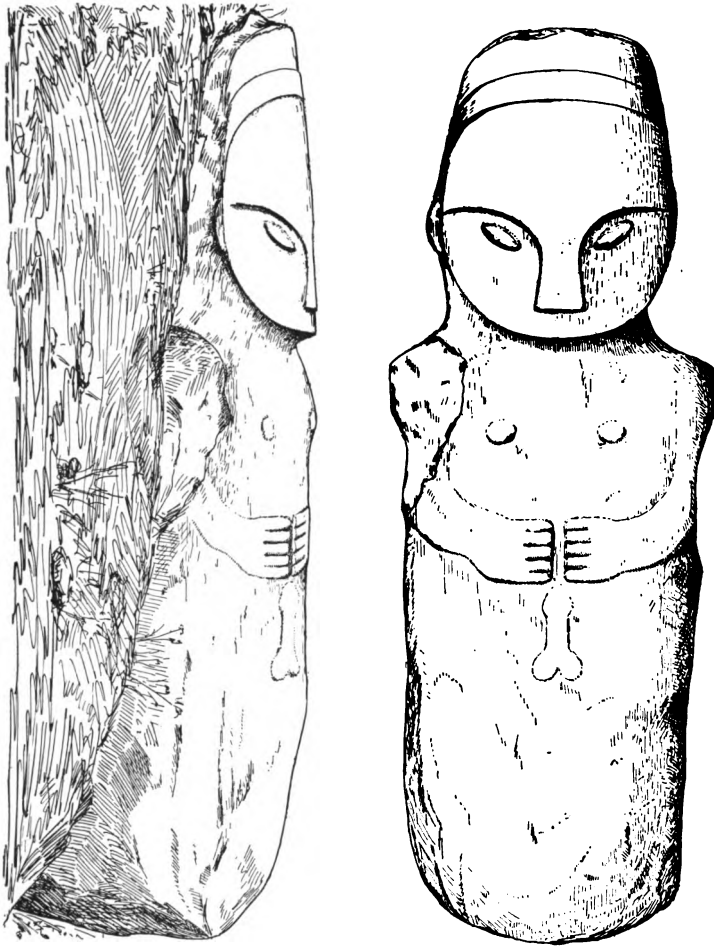
Higher up on this k a l a m b a site lies on the ground a stone image, evidently representing a man, the male generative organs being clearly seen (fig. 50). It recalls the



About 1:50

Fig. 49 — Diagram showing a vat with two partitions. On the northern bank of the Tawaelia, Bada. On Map 11 its position is marked with an x.

majority of the stone images of Bada and some of those of Behoa and Napoe. Its face slightly tapers at the top. The outlines of the nose continue into the eyebrows. The eyes are oval and slightly slanting. No mouth is shown, but two bumps, 20 centimetres long, on either side of the head, represent ears. Along the forehead runs a band, 12 centimetres broad, presumably some kind of head ring. The profile is almost straight, contrary to Tadoelako in Behoa, whose profile is concave. The sides of the face are slightly bulging out. The chin and the outline of the lower jaw stand out clearly against the neck from which the chin projects 8 centimetres. Shoulders as well as arms are given. The right shoulder is damaged. Arms, nipples, and generative organs are carved in low relief. The hands of the image very nearly meet in front, immediately above the penis, turned upward. This is a peculiar trait. In all other images I have seen, the male organ is seen between the stretched hands. The image has a length of about 367 cen-



1: 30

Fig. 50 — Stone image lying on the northern bank of the Tawaelia, Bada.
See Maps 10 and 11 A.

timetres and is rather thick. Its head lies almost due north-west, its bottom part southeast. If we presume that the image toppled over directly backwards, it would have faced due southeast when standing.

When I had carefully examined and measured the image and made a diagram of it, we walked on eastward,



KAUDERN photo 1918 About 1:50

Fig. 51 — Gigantic stone image on the northern bank of the Tawaelia, Bada. See Maps 10 and 11 A.

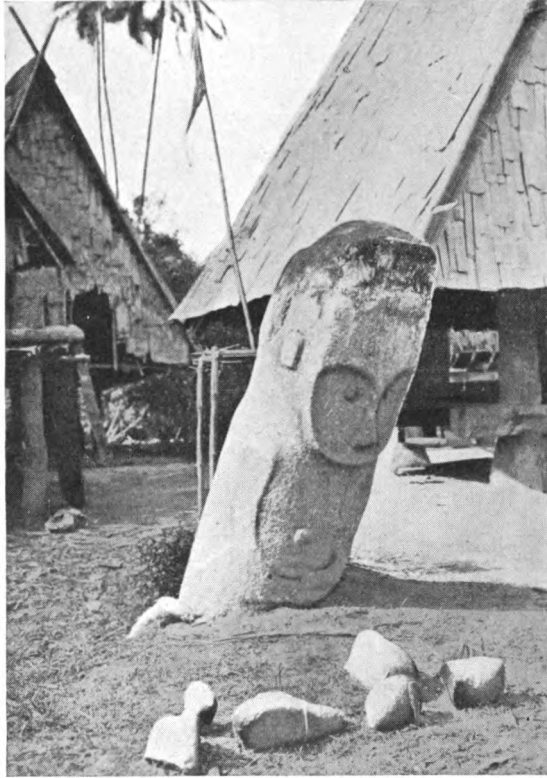
following the river, to see another stone image which my companions said was a very big one. When we had passed through a small tributary of the Tawaelia, the bank of the river grew steeper and higher as we proceeded with our

walk. Suddenly we stood at an old bend of the river, now a stagnant body of water in the shape of a horseshoe. The bank of the river is here very steep and traversed by small ravines (Map 11 A). Climbing the bank at this place, I noticed pots of clay of medium size, whole as well as broken, sticking out of the walls of the ravine about one metre below the surface of the ground. My companions would not allow me to examine these pots, not even to touch them.

When we got on to the grassy plain we saw at a short distance a gigantic stone image (fig. 51), leaning to one side, flanked by two trees, facing west, possibly with a slight deviation towards the south (5°). This image differs from other stone statues of these tracts not only as to its remarkable size. It is comparatively flat and thin. Its almost circular face has a diameter of 175 centimetres. Its right side is about 440 centimetres, which would have been its height if it had not been leaning over towards the left. Nose, eyebrows, almost circular eyes, arms, hands, nipples, and generative organs, seen between its hands, are represented in the same way as in other images. Bumps on either side of the head represent ears. The forehead is bounded by a sharp curving line which could be suspected to be the roots of the hair, if there had not been a second line above it, less sharply marked, however. Probably this is a head band, similar to that of the above mentioned image. A remarkable feature I have not seen in any other image in Bada is a mouth, small but distinctly marked. In front of the statue was a pit which KRUYT had made when examining it a couple of months before my visit to Bada. The natives supposed he had been looking for gold or other treasures.

I searched the place carefully without discovering any *kalamba* or other worked stone object. In the far north, near the foot of the mountains I saw there were a good number of big blocks spread over the plain. My companions said these were common stones, not worked by man. As the weather looked rather threatening I had to give up inspecting them.

West of the large image a valley has been formed by the small tributary we had crossed. Its western side is gently sloping, its eastern, a steep cliff. Between the gigantic stone man and this steep cliff the ground is covered with



GRUBAUER photo 1911

Fig. 52 — Langke Boelawa, stone image at Bomba, Bada.
Map 10.

small hills of earth, suggesting mounds. Besides there are several circular or oval pits. It does not seem impossible that this could be a large old grave field (Map 11 A). I very much regret not having had the chance of making even a trial excavation.

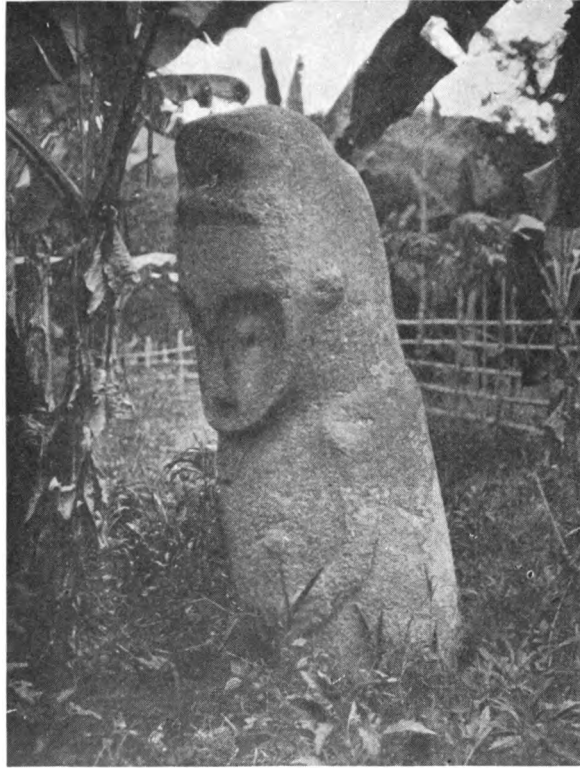


KAUDERN photo 1918

Fig. 53 — Langke Boelawa, the same as in fig. 52.

On the verge of the steep bank of the ravine I discovered a wall, of earth, originally very likely octagonal (Map II C), but at present partly destroyed by erosion. I asked my companions about it but they had not noticed it before
W. Kaudern. 7

and could offer no explanation of it. They agreed with me that the wall could not have framed a paddy field to keep the water in place, since the ground was higher inside the wall. I suggested it might have been part of a *benteng*,

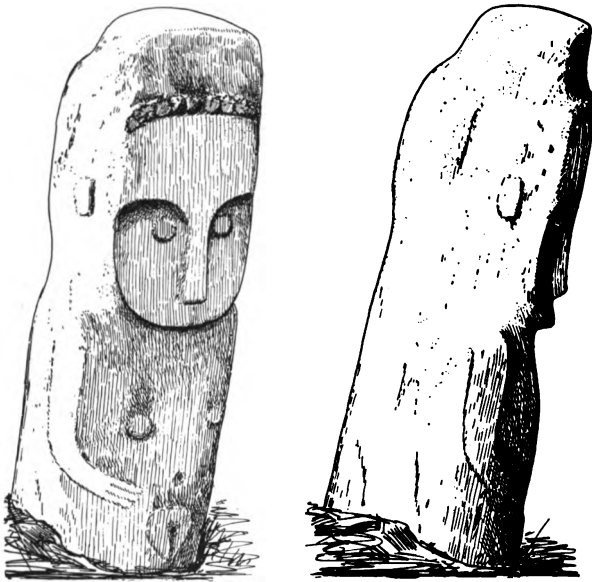


RAVEN photo 1917

Fig. 54 — Langke Boelawa, the same as in figs. 52 and 53.

native fortress, but they said there had never been a *benteng* here. Perhaps it has been connected with the small hills of earth a great number of which are near it, a surmise, however, which could be verified or refuted only by excavations on the site. I measured the octagonal elevation and made a profile through it (Map 11 C a 1 — b 1). As a

heavy rain was threatening I had to stop working and return to my quarters. I descended the steep bank, but not at the place where we had climbed it to reach the plain. Also here I saw a great number of broken pots sticking out of the bank at a depth of about one metre below the surface of the ground.

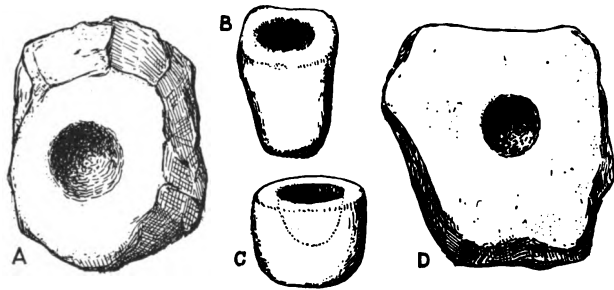


About 1:25

Fig. 55 — Diagram showing Langke Boelawa.

The following day I spent in searching the eastern part of the Bada plain. My first destination was Bomba, situated farthest to the east. Here the image stands which GRUBAUER figures (fig. 52). The oldest part of the village still is surrounded by a bank of earth in rather good condition and mostly grown up with a hedge of bamboo. Almost in the center of the village the stone image, of a man's height, 179 centimetres, stands. As will be seen in figs. 52—55 this image is an almost cylindrical block of stone in which a face is carved. Arms, nipples, and generative organs are

executed in low relief. A neck is but slightly marked. The face is of usual style, the eyebrows, however, straighter than in most other statues, which have slanting curved eyebrows. The eyes are almost circular. A mouth is not shown. The ears, small rectangular bumps, are rather high up on the sides of the head. Along the forehead runs a row of semi-globes, some of which are damaged (fig. 55). These no doubt represent a string of beads keeping the woman's hair in place. On the crown of the head the hair of the image seems to be dressed into some kind of toupee. The



1: 20

Fig. 56 — Stone mortars. A, near Kolori, Bada; B, from Boelili, Bada; C, from Bariri, Behoa; D, from Gintoe, Bada.

arms are carved in low relief. Each of the hands has but three fingers. The nipples are not more prominent than in the case of images representing men. That the Bomba statue is a woman cannot be doubted. Between its stretched hands the female generative organ is traced in the manner commonly used by the natives. The area genitalia is represented by a triangle with its apex below. A small line divides the apex into two halves.

At the foot of the statue lay some smaller stones of irregular shape, the "children" of the woman according to the native belief. At the time of my visit they were hidden by long grass. In GRUBAUER's photograph, however, they are visible (fig. 52).

There was nothing about the image indicating that the natives brought it offerings or felt any reverence towards it. When I had measured it, taken a photograph and made a diagram, our party walked on to the Tawaelia, which



KAUDERN photo 1918

Fig. 57 — L o g a, image near Pada, Bada.

we crossed and then we proceeded westward to a place where my companions said they knew there were ancient stone objects. We passed an old sawah, waded through a little stream, followed its low sandy shore for a while and then climbed its steep bank. On reaching its top, we stood in front of a large k a l a m b a, broken into pieces

and lacking a cover. In a thicket I discovered a stone mortar of usual type. Its upper, rather oval, surface is smooth, its sides rough. The diameter of the central hollow is 21 to 22 centimetres, its depth 16 centimetres. The block of stone in which the hollow is made is about 65 centimetres



KAUDERN photo 1918

Fig. 58 — In the ground is seen the bottom part of a large clay pot. Near Pada, Bada. See Map 10.

long by a breadth of 50 centimetres (fig. 56 A). My guide said these hollow stones were called *pointoa* in Bada (Map 10).

About half way between the site of the broken *kalamba* and the ruins of the former village and *benteng* of Kolori, situated farther to the west on the plain, there is a well preserved *kalamba*, sunk, however, into the ground. Its inner diameter is 125 centimetres by a depth of about as much. As my companions told me there were

no more ancient stones to see in the neighbourhood, and not discovering anything of interest myself, I returned to Bomba. The village schoolmaster, a native of Minahassa, North Celebes, told me about the ancient monuments in the eastern part of Bada.

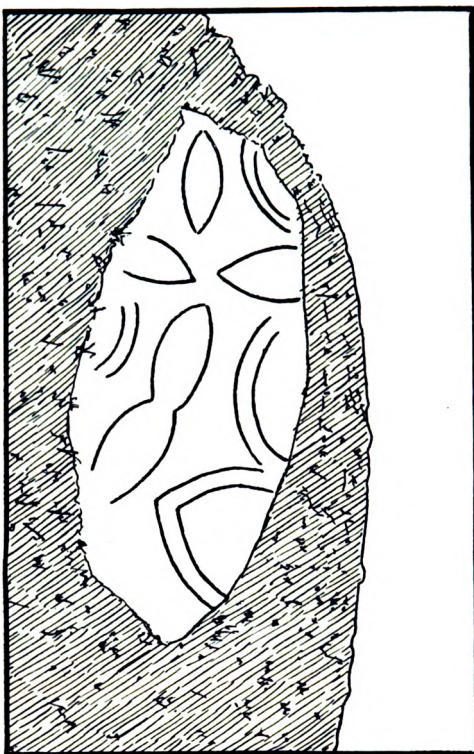


1: 20

Fig. 59 — Large clay vessel mended. In the Museum of Far Eastern Antiquities of Stockholm. Excavated near Pada, Bada.

My nearest objective was an image near the village of Pada. On the crown of a ridge stretching from Pada towards the northwest (Map 10), I found a stone image of about the same size as the Bomba image, but facing due south, possibly with a slight deviation towards the west, at the most 10° . It is made in common style, having an oval face with a nose, eyebrows and oval, slanting eyes (fig. 57). No mouth is shown. Arms and nipples are carved in low relief. The hands and generative organs were covered

by earth which the natives refused to let me remove. They were positive, however, about the sex of the image. It was a man, they said. In KRUYT's paper in French its name is said to be *L o g a*.



After GRUBAUER

Fig. 60 — Stone with incised ornaments. Boelili, Bada. Presumably the same cover as shown in fig. 61.

A few paces from the image, in the direction of Pada, I found in the trail some shards of a pot, evidently much bigger than those nowadays used by the natives. My companions were of the opinion that the shards were fragments of a pot dropped by somebody here. A closer examination revealed the fact that the shards belonged to a large pot

buried in the ground. We had some difficulty in digging it out since it was broken into numerous pieces all of which I collected. The pot contained nothing but lateritic earth. I took a photograph of its bottom side and a native sitting by so as to show how big it is (fig. 58). My companions said

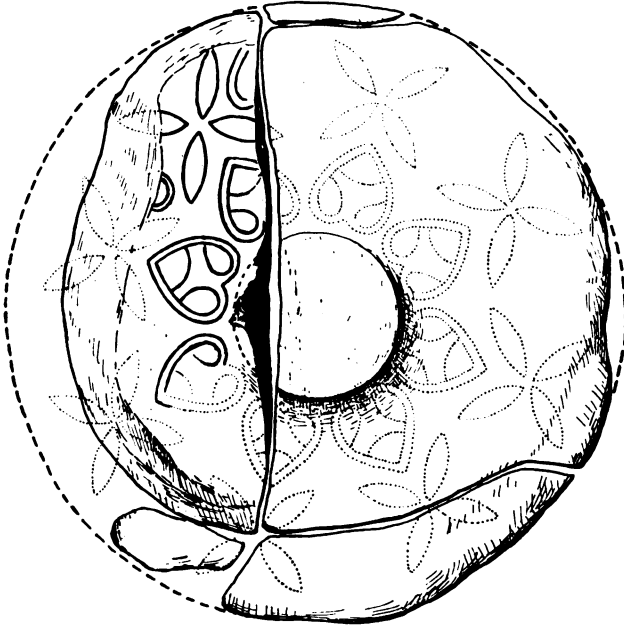


Fig. 61 — Attempt to reconstruct a broken cover for a stone vat.
Boelili, Bada.

such big pots were altogether unknown to them. Later on, when I came back to Sweden, my pot was put together and mended and is now in the Museum of Far Eastern Antiquities, Stockholm (fig. 59). It is 111 centimetres high, its maximum circumference is 289 centimetres, the diameter of its mouth, 40 centimetres. The wall is very thin for such a large vessel as this one; it varies between 0.7 and one centimetre. Its somewhat damaged rim is more solid, being about 2 centimetres thick. In all probability there is

a whole field of these big pots near the stone image, because I saw plenty of the same kind of shards lying about on the ground. When we were finished collecting the pieces of the pot, we walked on to Pada where we rested for a while in the house of the village headman. I asked him about the big pots. He seemed to be just as ignorant of their existence as my companions, but he was very interested and the natives flocked to the headman's hut to see my pot.

From Pada we went on to Boelili, a rather big place. The village schoolmaster, a Minahassa man, offered to be my guide round the old village. Like most old villages it is situated on the top of a hill and surrounded by a bank of earth, planted with bamboo. In the high central part is an old temple, and all over the village there are worked stones, intimating that Boelili is an old settlement.

Among the stone objects we noticed an image of common appearance. Its head is knocked off and lies on the ground before it, a little to the right, face downwards. Of course I was not allowed to turn it over to have a look at it. The natives would not even let me touch it. The image faces due east, possibly with a deviation of 5° towards the north.

Near the image is a broken *k a l a m b a*. Its cover, also broken into pieces, is lying close by it. I noticed some ornaments on it but had some difficulty in making a diagram in the rapidly disappearing daylight. I suppose this is the stone which GRUBAUER shows (fig. 60), and the ornamented stone fragments recorded by SCHUYR. I have tried to make a reconstruction of the cover and the pattern incised on it. It seems to have had a central knob, about 55 centimetres in diameter. Round it, eight heart-shaped figures are engraved. In an outer circle there are a range of four-petalled flowers alternating with some other ornament, judging by some arched double lines (fig. 61 and fig. 62: 14, 16).

On the hill where the image and the *k a l a m b a* are located, I noticed a great number of stone mortars of va-

rious shapes. One is goblet-shaped (fig. 56 B). Its hollow has a depth of 10 centimetres by a diameter of 14 centimetres at the aperture. Another mortar has in addition to its big hollow, several small ones, recalling the stones at Peana. One mortar has three groups of rather deep grooves, possibly

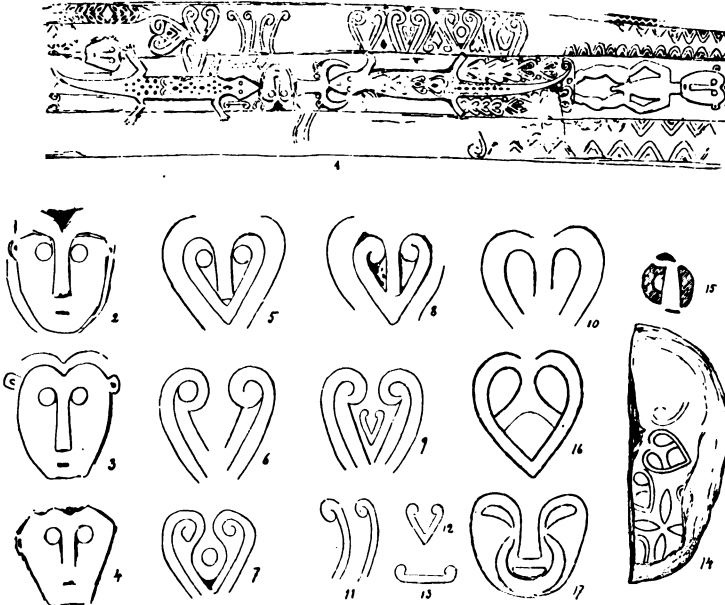
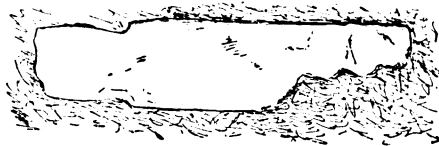


Fig. 62 — Diagram showing wood carvings on a temple drum in Lindoe, which represent human faces in various stages of conventionalization; the conventionalized face engraved on a stone cover for a vat in Behoa; and the heart like figures on a broken cover at Boelili, Bada. 1, central part of the drum adorned with various patterns; 2—13, show the gradual conventionalization to which the human face has been subject; 14, a piece of the broken cover at Boelili; 15, all the pieces belonging to the cover; 16, heart shaped ornament on the cover at Boelili; 17, conventionalized face on a cover in Behoa.

brought about by the natives sharpening their spears on it. The hollow of one mortar is surrounded by a low wall. There is also a big block of stone with numerous small hollows, recalling a block at Panapa, Koelawi. Unfortunately I had not time to study all these stones closely. It was getting dark and I had a long way back to my quarters at Gintoe.

The third day of my visit to Bada I visited the south-western corner of the Bada plain where I had been told there were several ancient stone monuments. With my companions I directed my course from Gintoe towards the southeast. After a walk of at the most one kilometre we stood before an image, 4 metres long by a breadth of 90 centimetres, fallen headlong on the ground, face downwards. This made a closer examination impossible (fig. 63). The back of the image is rather plane without being carefully levelled. The top of its head is square but it may be that the crown is knocked off. The image lies with its head to the west. Supposing it fell directly forward, it



About 1:80

Fig. 63 — Fallen image, four metres long, lying a little to the south of Gintoe, Bada. See Map 10.

would, when standing, have faced due west. Near it I noticed some blocks of stone, presumably the remainders of one or two *kalamba*.

The plain is here scattered with small hills, about one metre high, often more or less ranged in rows. Possibly this is a graveyard.

About 25 to 30 metres to the west of the fallen image there are some blocks of stone, evidently the remainders of a *kalamba*. Besides I noticed a stone mortar with a rather small hollow. Its depth is 13 centimetres, its diameter at the aperture, 15 centimetres (fig. 56 D).

From this site we went on towards the southeast, passing a bamboo thicket, possibly an old *benteng*, or perhaps an enclosure for buffaloes. Not far from this we found a large *kalamba* with broken walls. It had no cover. About 100 metres southeast of it is a hillock of the

height of a man. My companions said they did not know what it was. To me it looked exactly like a sepulchral mound.

We walked quite a good distance towards the south over large paddy fields to see a stone which my companions



KAUDERN photo 1918

Fig. 64 — Stone image which the natives call a buffalo, located in the sawah between Gintoe and Bangkekae, Bada. See Map 10.

said was a buffalo turned into stone. We had some difficulty in approaching it since a herd of more than one hundred buffaloes walked about round it in the mud of the sawah, where the paddy had not yet been planted.

The "stone buffalo" is a block, about 3 metres long, in which a face is carved. It lies on a broad bank of earth

between two paddy fields (fig. 64 and Map 10). Where I stood, I had Boelili in the east northeast, Badangkaja in the southwest. How the natives could call it a buffalo I do not understand. The upper bulging surface of the block is partly, as it were, pockmarked with small hollows. In one end there are some scores or scratches, which the natives stated to be of recent date, being marks of the weapons which had been ground or passed over it in the belief that this would add to their power. In the other end of the stone, the one facing north, a conventionalized face is carved, recalling the faces of the stone images. A nose, eyebrows, eyes, and ears, but no mouth, are shown, but there are small details not present in the stone statues. Its round eyes have a small central hollow, evidently representing the pupil. In the tip of its nose there is a horizontal groove and all along its ridge another groove, ending in a small circular hollow between the eyebrows. Above these a second line is seen, parallel to that of the eyebrows. The ears are represented by two oval, slightly hollow, bumps at the ends of the eyebrows. Along the forehead three parallel curved lines are seen, the one in the middle less distinct than the other two. On the left side of the forehead all lines are more distinct than on the right side.

After having taken a photograph of the image and made a diagram to illustrate its peculiarities (fig. 65), I went on about 50 metres towards the southeast where, in the middle of a paddy field, a broken *kalamba* of usual appearance stands. We continued to the village of Bangkekae where we got a man who guided us to a stone image standing in a meadow below the village of Tinoë. This statue in most respects is similar to the stone image lying on the northern bank of the Tawaelia as well as to the image near the village of Pada. In some details there is a little difference. The image stands 155 centimetres high. A great part of it is buried in the ground so that neither hands nor generative organs can be clearly seen. My companions said

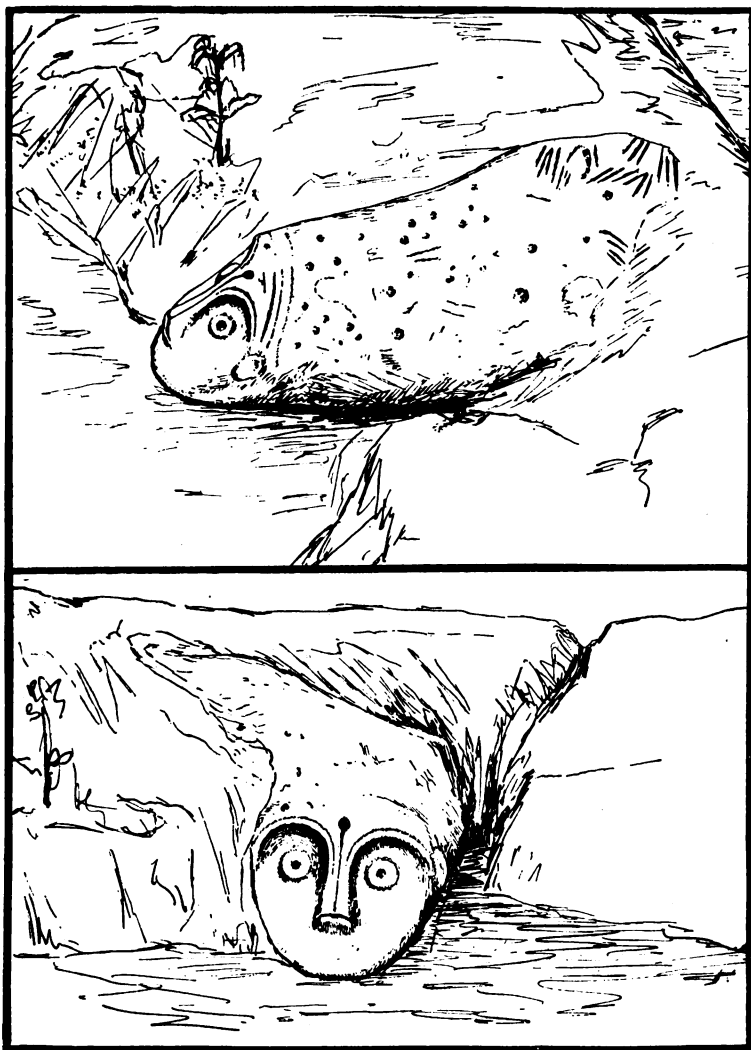


Fig. 65 — Diagrams showing the "stone buffalo," Bada.

it is a man. Arms and nipples are executed in the usual manner. The width of the trunk is nearly twice its thickness. In transverse section it is elliptical. There is nothing unusual about its neck and shoulders. The sides of the face are slightly curving, the forehead slightly curving backwards. The profile is very nearly straight. A nose, eyebrows, and eyes are shown, the latter oval and somewhat slanting. The ears are rather high up on the sides of the head. The

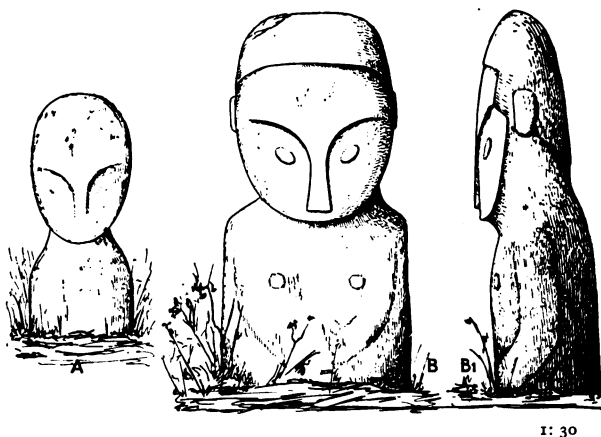


Fig. 66 — Two stone images in southern Bada. A, the smallest of all statues; B, image standing west of Tinoë. See Map 10.

limit of the forehead is marked by a slightly curving line, possibly representing the roots of the hair, since it continues down over the temples and since there is a similar curved line on the neck, running almost from one ear to the other. In front as well as in the neck the stone projects a little beyond the two lines as if to show the hair. There are no traces of a headband (fig. 66 B, B 1). The statue faces north, deviating about 33° towards the east.

From this image we found our way down to the bank of the Malei which on this occasion was rather rapid and very high. We had some difficulty in finding a place where we could ford it. Having reached the opposite bank, we

crossed a vast plain where buffaloes had grazed, and then climbed on to a terrace. There I saw the smallest of all stone statues in Bada that I know of (fig. 66 A). Its height is but 97 centimetres above the ground. It is not in such good condition as most other images. Either its face never was well worked, or it is much weather-worn, which seems



KAUDERN photo 1918

Fig. 67 — Stone vat located near the village of Badangkaja, Bada.
A diagram of the same vat is shown in fig. 48 D.

most likely. Of its 97 centimetres, 60 belong to its head. This, as well as its body is about 40 centimetres wide. The distance between the chin and the highest point of the eyebrows is 30 centimetres. All that can be seen in its face are two vertical lines suggesting a nose, merging into the eyebrows. This image was within a fence, and a small table or altar for offerings had been built for it. On the table lay some *sirih*, *pinang*, etc. By it two bamboo
W. Kaudern. 8

rods, each decorated with a strip of white bast cloth, were planted in the ground.

From this place we went on northward to Badangkaja, a village situated on a hill to the west of the Malei. In the neighbourhood as well as in the village itself a cultural layer, 15 to 20 centimetres deep, was observed, containing the same kind of coarse shards as those I dug out near Pada. The layer seemed to be 4 to 5 metres below the surface of the ground. I did not touch it, hoping to have a chance later on to examine it carefully so as to ascertain whether it owed its great depth to a dislocation, or still kept its original position.

In the village no statue or *k a l a m b a* was found but several stone mortars of various shapes. At least one was cup-shaped. At the site of a temple, now burnt down, I saw a heap of stones which had been thrown together with stone mortars. In a grove near the village I found three *k a l a m b a*, all without covers, and a stone mortar. Of the three *k a l a m b a*, two are in good condition, the third is rather badly damaged. The largest specimen of the three is leaning over (fig. 48 C). Its inner diameter at the aperture is 135 centimetres by a depth of 125 centimetres. At the rim the walls measure 18 centimetres, gradually increasing to 20 centimetres at the bottom, which is rather flat. The second specimen is sunk deep into the ground (fig. 67). It stands but 35 centimetres above it. The diameter of its hollow is 87 centimetres by a depth of 150 centimetres. Its wall is about 20 centimetres thick. It was filled with water which I scooped out. I found its bottom slightly convex as shown in fig. 48 D. The third *k a l a m b a* is in very bad condition and deeply sunk into the ground.

I returned to my quarters at Gintoe and next day started for Behoa. All my attempts to learn anything from the natives about the statues, *k a l a m b a*, stone mortars, clay pots, etc., had proved useless. Everybody I spoke to said that the stone monuments were there when the

forefathers of the To Bada came to the country. An old Bada man said the people who made them was called To Ra and had come from Malili, South Celebes. Of more interest, and no doubt in accordance with the facts, was the following statement made by the same man. Not very long ago the statues and *k a l a m b a* were standing unbroken. Some years before the year when the cousins SARASIN had passed through Bada (1902) the country had been visited with a severe earthquake and many statues and *k a l a m b a* were thrown down and broken.

If we compare the direction in which the pieces of the *k a l a m b a* No. 3 on the first site north of the Tawaelia have fallen, with the directions in which the statues have fallen or lean, except the fallen image southeast of Gintoe, it would seem as if the movement in the crust of the earth had passed from north to south, possibly with a slight deviation towards the northwest and southeast.

As to the huge clay pots no reliable information was to be had from the natives. The village schoolmaster of Badangkaja, a man from Minahassa, N. Celebes, to whom I spoke about the big pot I had found at Pada, said that in olden times people were buried in these pots, which were called *b e n g k i* in the Bada language. The natives of Tinoë were still expert makers of such big pots and would make them if ordered. Common small clay pots he said were kalled *k o r i* in the Bada language.

This may all be correct, but I have a suspicion the teacher had at least part of his wisdom from his colleagues at Bomba and Boelili. The day before, I had said to them that the big pot I had found might have been used for burial purposes. The schoolmasters of both villages as well as the natives had declared that they had never seen or heard anything about such big pots and added that Doctor KRUYT who had paid a visit to Bada a short time ago, was similarly in ignorance regarding them.

When I arrived at Badangkaja, everybody seemed to know that I had dug out a big pot, and it is not impossible that the report of my find also had brought my view upon it to the village. The schoolmaster, contrary to his two colleagues, declared that Doctor KRUYT had taken a fine specimen of the large pots.

RAVEN passed through Bada during his sojourn in Central Celebes in 1917 but seems only to know the Bomba statue. He took a photograph and was told by the natives that it was a woman called *Langke Boelawa*, Golden Anklet, who had been turned into stone. Some years before, he says, it had been brought to its present place from its original position near the foot of the mountains on the northern side of the near-by Tawaelia River. I suppose this is a mistake, since KRUYT saw the statue where it stands at present in 1908. RAVEN may have misunderstood the natives of Bomba. They may have told him there was a similar statue on the northern bank of the Tawaelia.

In his French paper of 1932, KRUYT gives some few particulars about the ancient stone monuments of Bada. He states that there are no less than thirty-eight *kalamba*, whole or broken, and thirteen stone images. He gives the directions faced by the following six images (pages 3 and 4): "Watou molindo (près de Bada ngkaia) et Langke boulawa (Bada), dans la direction du Nord, . . . Tosalogi (Bada) vers le Sud-Ouest . . . Loga (Pada en Bada), de quinze degrés par l'Ouest vers le Sud . . . Tarairoi (Gintou à Bada), de vingt degrés par l'Ouest vers le Nord; la statue aux environs de Tinoë (Bada) de 30 degrés par l'Est vers le Nord."

The site where the *Tosalogi* statue is found is not mentioned. I do not think it is any of the images I saw. This image as well as another one called *Pekelo*, are stated to represent men, *Langke boelawa* and a statue called *Pohoda'a*, of which no other particulars

are given, to be women. Of *Langke boelawa* KRUYT on page 4 says: "*Lanke boulawa porte probablement un collier de perles au cou.*" That this is an error is clearly seen in figs. 53 and 55. The stone lady does not wear her beads round her neck but round her head.

In KRUYT's paper of 1909, "*Het Landschap Bada in Midden-Celebes,*" page 359, *Tarairoi* is stated to be an image at *Boelili*, with partly broken head: "*waarvan een gedeelte van het hoofd er af is.*" (Compare page 82.) The head of the image which SCHUYT saw in 1910, GRUBAUER in 1911, and the present author, in 1918 in the village of *Boelili*, was knocked off and lay, face downwards, before it on the ground. Another detail about the statues given by KRUYT is that five of them have oval slanting eyes, and three, round eyes.

Of sepulchral urns buried in the ground KRUYT writes as follows, page 6: "*Du fait que, a certaines places dans le territoire de Lore, il y a des kalambas, des statues de pierre et mortiers de pierre aux endroits où sont également des champs d'urnes, . . . c'est le cas à la colline de Pada et sur le haut-plateaux de Bada ngkaia en Bada.*"

Rampi — Leboni

Not having visited these two districts south of Bada, I shall have to confine myself to giving a report of the data as given by other workers (Map 12).

The two cousins PAUL and FRITZ SARASIN seem to be the first scientific visitors to Leboni, passing through this district in 1902. They have, however, nothing to tell about ancient monuments. GRUBAUER, who in 1911 came to Rampi and Leboni, journeying in Celebes, does not report any antiquities from these provinces.

A Salvation Army officer working in Celebes, told me in a letter in 1920 that in Rampi he had seen a stone with

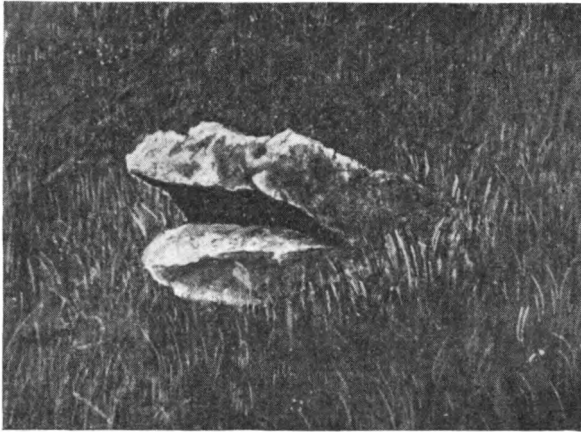
buffalo horns engraved on it. In the absence of a photograph or a diagram, it cannot be taken for granted that this actually is a representation of buffalo horns, a matter to which I called attention in 1921 in my Swedish book "I Celebes Obygder," Vol. II, p. 137.

In 1918 the antiquities of Rampi and Leboni were examined by KRUYT. As far as I am aware he has not yet published an account of this investigation, only touched upon the matter in his French paper "L'immigration pré-historique dans les pays des Toradjas Occidentaux." Enumerating the stone statues of Central Celebes, KRUYT on p. 2 states the following: "à Rampi (Lebon) 2." On p. 4 where the directions faced by the statues are given, he says: "Timo'oni (Rampi) vers le Sud," and "La statue près de Mbeloi (Rampi) vers le Sud-Est." Thus it would seem as if both statues are in Rampi. The site of the image facing southeast, is given but where to find Timo'oni, facing south, is not said. What makes the whole more difficult to understand is that KRUYT on p. 2 after Rampi puts (Lebon) in parenthesis. What is this "Lebon"? The name is not on any of the maps of Central Celebes at my disposal, not even on KRUYT's big map of Central Celebes. South of Rampi we have the Leboni district. This, however, is not part of Rampi but a settlement topographically separated from Rampi as seen in ABENDANON's great work "Geolog. en Geogr. Doorkruisingen van Midden-Celebes," and in GRUBAUER's "Unter Kopfjägern in Central-Celebes." "Lebon" very well could have been interpreted as a Frenchified Leboni, if KRUYT in his paper had not used Leboni, for instance on p. 6. Besides he gives all other names in their original form, although in French spelling.

As to the village called Mbeloi there is on my maps no such place, neither in Rampi, nor in Leboni. In the latter district there is a village Boeloi which may be the same as Mbeloi, considering the great divergences often noticed in the spelling of geographical and other names in Celebes. It

would thus seem as if one of the two statues stands near the village of Boeloi in Leboni.

No *kalamba*, *toetoena*, *nondjoe dji*, or other prehistoric stone objects seem to be recorded from Rampi and Leboni. KRUYT in his French paper states that there are urn fields, "*champs d'urnes*," in several districts in Central Celebes. Among these he mentions "*à Leboni à Rampi*." Judging by this statement it seems as if KRUYT



GRUBAUER photo 1911

Fig. 68 — Stone located south of Leboni in Takalla Hills, called the dog of the Sultan, *mengganga*.

meant that Leboni is situated in Rampi. If my surmise is correct, both stone images may be in Leboni and not in Rampi.

Speaking of Leboni, I want to call attention to a strange stone in Takalla Hills, south of Leboni, shown by GRUBAUER on p. 339 of his book "*Unter Kopfjägern etc.*" (fig. 68). Of this stone GRUBAUER writes as follows: "*In einer Einsattelung nahe dem Gipfel derselben passierten wir ein Felsenmonstrum, das bei einiger Phantasie dem aufgesperrten Rachen eines vorweltlichen Ungeheuers glich. Die Steingruppe gehört zu den noch ungeklärten Merkwürdigkeiten des Takalla-*

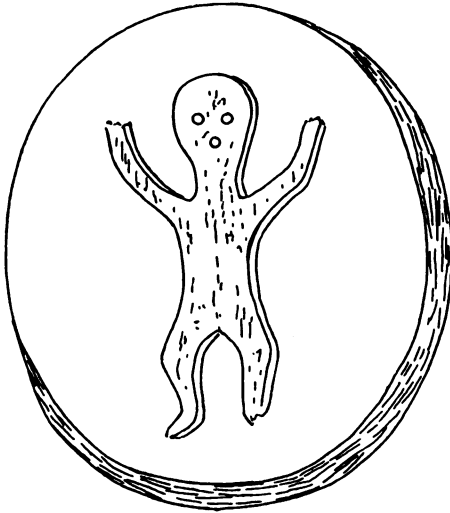
Gebirges. Die Eingeborenen vergleichen sie mit einem Hundekopf, dem sie den schwer zu erklärenden Namen 'mengganga' gegeben haben, was in freier Übersetzung so viel bedeutet als Hund des Sultans. Jeder an dieser Stelle vorüberkommende Wanderer rauft eine Hand voll Gras zusammen und legt es dem Hunde ins geöffnete Maul. Als Erklärung sagte man mir, der Hund des Sultans müsse Gras zu fressen bekommen, damit er die Felder der Opfernenden vor der Verwüstung durch wilde Schweine behüte — etwa in dem Sinne. Ich gebe dir Gras zu fressen, friss du dafür alle Schweine, welche mein Feld verwüsten wollen! Über die Bedeutung des Namens mengganga vermochte ich keine befriedigende Auskunft zu erlangen. Niemand weiss, wer oder wo der Sultan sei, es hätte eben schon immer so geheissen."

East Central Celebes

Unlike the districts on the Koro and its tributaries, the eastern part of Central Celebes seems to be very poor in ancient stone objects. Almost everything as yet known to science from this part of the island has been discovered and described by KRUYT. Rare as stones worked by man are, numerous stones strangely shaped by nature are known, and to these the natives attach legends.

No stone statues seem to be found here, and it is uncertain if there are any *k a l a m b a* and *t o e t o e n a*. I was unable to get any evidence of stone mortars being recorded from this region. In a paper of 1915, "De steen Watoe Taoe in de Jaentoe vlakke," published in "Notulen van de Algemeene en Directievergaderingen van het Bat. Gen. v. Kunsten en Wetensch.," KRUYT reports some strange stones from Ondae, E. Central Celebes, which may be remainders of some *k a l a m b a* and *t o e t o e n a*. The schoolmaster of the village of Penggoli, Ondae district, told KRUYT that on the plain on the Jaentoe there was a stone sculptured with a human figure. KRUYT in 1915 visited this place,

located about 6.5 kilometres north of Penggoli right in the middle of the Jaentoe plain. He says he found an oval slab of stone, 95 centimetres long by a breadth of 85 centimetres and a thickness of 6 centimetres. This the natives called *W a t o e T a o e*, "steen als een mensch." On its upper surface a human form is carved in relief, about 2 centimetres high. The lower surface is levelled. The rock,



After KRUVT About 1: 15

Fig. 69 — Oval stone slab with a human form in relief, possibly a cover for a stone vat. Jaentoe Valley, E. Central Celebes.

a mica-shist, is much weathered. The left foot of the figure has fallen off, and it was impossible to see if the hands originally had fingers or not (fig. 69).

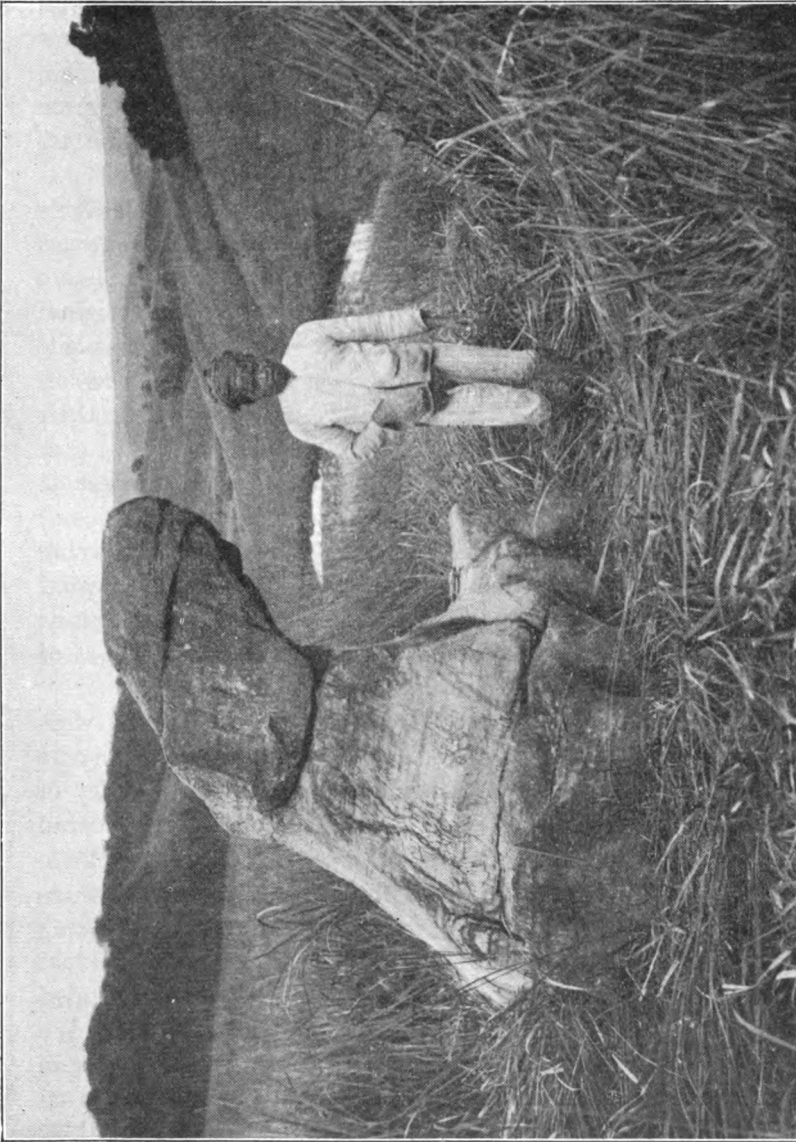
Near this stone KRUVT found another one of the same shape, measuring 85×70 centimetres. Its thickness was 11 centimetres. At the same place he discovered the half of another similar stone, and at a distance of about 3 metres still another stone. This measured 95×85 centimetres. The backs of all these stones which were towards the ground, were levelled. On their upper surfaces certain irregularities

were observable, possibly remainders of ornaments. On one of them a curved line could be seen, perhaps suggesting the arms of a human form. The execution, KRUYT says, reminds one of that of the worked stones he had seen in Behoa. He is of the opinion that the slabs have been covers of sepulchral vats, "lijkpotten," in the same manner as in Behoa, Napoe, and Bada. He did not see any vats, however. "Van potten heb ik geen spoor gevonden." If there ever were any, they must be altogether in ruins, if some pieces of mica-shist near the slabs were not remainders of some vat. "In dit geval zouden de weinige brokken glimmerschiefer, die ik in de nabijheid van de plek vond, overblijfselen van de potten zijn." KRUYT holds that the slabs have been brought to the plain from the hills to the east and west of the Jaentoe Valley where the rock is mica-shist.

KRUYT says the natives, i. e. the To Ondae and To Pakambia, did not seem to take much interest in the W a t o e T a o e. Many of them did not know it was there until lately, when the Dutch Government ordered the natives to come down from their hills to live on the plain. KRUYT is of the opinion that these sculptured stones belong to the same culture as the megaliths of Napoe, Bada, and Behoa, and like these should be ascribed to another people than the ancestors of the Toradja.

The natives told KRUYT that the human form on the stone was a man who had been out hunting. Suddenly there was a terrible storm and the man was turned into stone. Other natives said the man was not a hunter but a fisherman. The natives declared that if you knocked at the stone this would bring about a storm. Men who were out in the valley catching buffaloes which had run wild, used to give the stone man a chew of sirih to secure his help in the pursuit of the beasts.

In his French paper of 1932, KRUYT when speaking of stone vats, k a l a m b a, on page 1 says: "Deux ou trois kalambas, bien solitaires, se trouvent dans la plain



KAUDERN photo 1918
Fig. 70 — Stack, held to be a stone man. Near the village of Topakoe, E. Central Celebes. See Map 12.

de Jaentou," and near the bottom of the same page: "Il y a dans la plein de Jaentou, peut-être deux avec un couvercle." These data do not seem to refer to the stones he saw in 1915, three slightly oval slabs and a half slab, recalling the *toetoe na* of Bada and Behoa, and some mica-shist fragments which he suggested might be the remainders of some *kalamba*.

From E. Central Celebes KRUYT in "De Bare'e-Sprekende Toradja's," Vol. I, mentions some menhir-like stones standing at a place a little to the north of Lake Poso. There is, according to KRUYT, a legend saying that the original home of the Toradja tribes was here, and from this place they migrated, lead by six brothers and their sister, all over the area drained by the Poso. Before leaving their home they set up seven stones, "*watoe mpoga'a, de steenen der scheiding.*" Of these only three are left at present. Another legend speaks only of five stones.

Besides these menhir-like stones, KRUYT, without giving any particulars about their appearance, mentions several other stones in the Poso district, connected with legends about people turned into stone, and disappeared villages of which nothing was left but some stones.

On my walk across Celebes from Paloe on the west coast to Kolonedale on the east coast, I stopped for some days at the village of Tomata, southeast of the district of Ondae. I was told by the natives of a stone image located about ten kilometres south of Tomata, not far from a little pond. One could see its head, its arms and hands, my informants said. Naturally I was deeply interested, thinking this might be an image similar to those I had seen in Bada. The village headman found me a guide and accompanied by this man I started for the site of the stone image. We followed a slightly rising trail, winding along the slopes of gently rolling hills and ridges. On our way we often passed pits or funnels of various sizes, and here and there I noticed strangely shaped blocks of limestone, that is to say, this

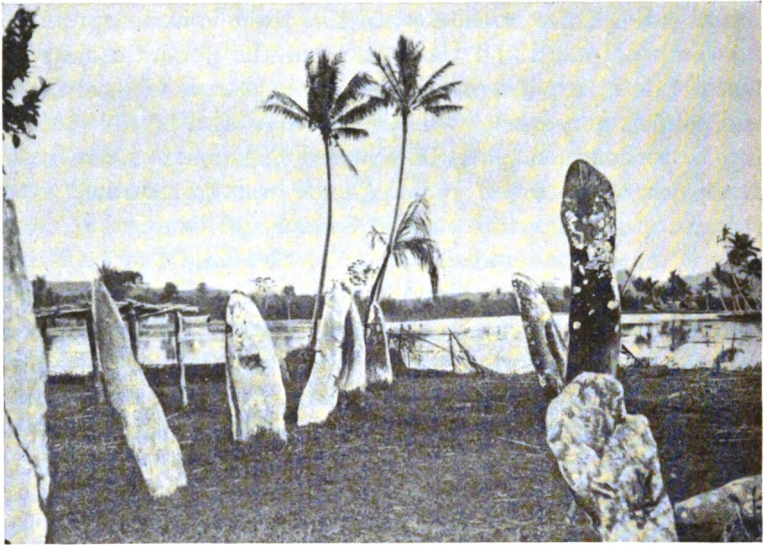
was a typical karst region. After a walk of about seven kilometres we came to a little village called Topakoe, and about two kilometres from this place we reached our destination. The stone image (fig. 70) was altogether a disappointment to me. Indeed, only a vivid imagination could see anything of a human being in the stone in front of us, a stack 180 centimetres high, weathered or ground by water, of fine-striped, greyish-white limestone. It stands on the top of a ridge and at the foot of this there is in a depression a swamp or pond. Of the stone and the pond the natives had a tale. In olden times there had been a village where the pond is at present. On the occasion of a terrible storm it was flooded, and all its inhabitants fled to save their lives. A woman who turned to look back was transformed into stone. "Just as in the case of Sodom and Gomorrha," one of my informants added. Possibly this tale has been influenced by the Old Testamentary story of Sodom and Gomorrha, but it may just as well refer to a natural catastrophe at this place, considering the fact that it is a karst region and that the marsh is situated in a longish oval depression which evidently is a sotch. (Map 12).

Southwest Central Celebes

Not having visited this part of Celebes myself, I shall have to quote the scanty observations made by other workers. GRUBAUER seems to be the first author to report stones placed in upright positions by man in the districts drained by the Saadang. In his book of 1913 he mentions such stones from three localities. One of these located in the Rantepao valley, he has represented (fig. 71).

Of his journey in the Saadang Valley, GRUBAUER on page 193 of his book, says that after a walk of some hours from Salu-Limbang he came upon a double file of big conical blocks of stone: "Eine auf einem Hügel errichtete Doppelreihe grosser kegelförmiger Steinblöcke liess eine alte Kult-

stätte vermuten." On his way to Bilalang he came across another such group of stones. On page 222 we read as follows: "Auf einer felsenübersäten Kuppe stiessen wir auf eine alte Kultstätte. Ein Dutzend spitz zulaufender Granitblöcke von Kindergrösse bis Manneshöhe waren daselbst in Abständen von je 4—5 m im Kreise aufgestellt. Diese Steine dienten zum Anbinden der Opferbüffel und ihre verschie-

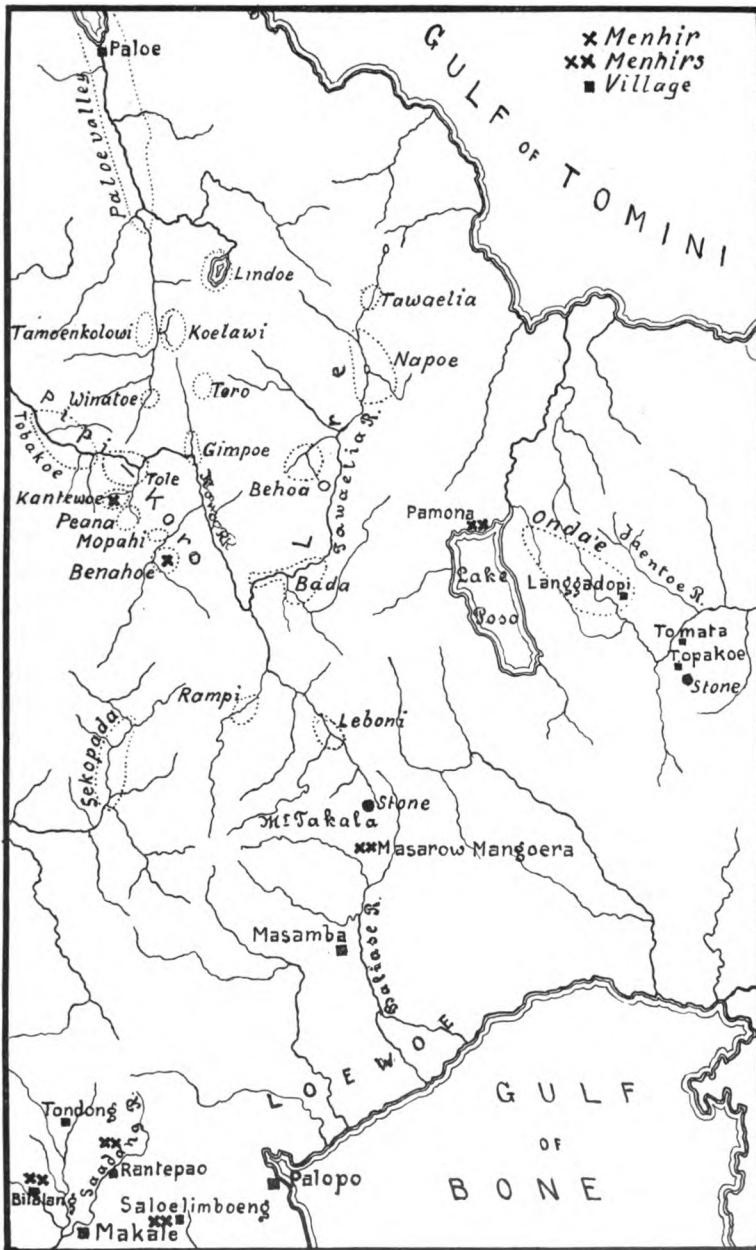


GRUBAUER photo 1911

Fig. 71 — Stones ranged in two files. Rantepao Valley, SE Central Celebes.

dene Höhe versinnbildlichte den Rang der opfernden Familie, deren jede ihren eigenen Stein besitzt." Of the villages he passed travelling from Tondong down to the Rantepao valley he says on page 278: "Je tiefer wir kamen, desto reicher wurde die Natur, und desto häufiger trafen wir Dörfer an. Keinen derselben fehlte ein Festplatz mit den uns schon bekannten Steinreihen zum Anbinden der Opferbüffel." (Map 12).

Judging by GRUBAUER's description of the festival



Map 12 — Central Celebes. Crosses indicate the sites of menhirs.

celebrated in honour of the dead at Rantepao, the two kinds of stone groups, the double file of blocks and blocks ranged in a circle, seem to be rather common in these tracts. On page 257 he writes: "Die Veranstalter der Feier wählen nun zunächst einen ihnen passend erscheinenden Hügel, der als Festplatz hergerichtet wird. Hier möchte ich einschalten, dass an anderen Lokalitäten, z. B. im Rantepáo-Tale, nicht wie in Tóndong willkürlich wechselnde, sondern stets dieselben Örtlichkeiten zur Abhaltung von Totenfeiern benutzt werden. In diesem Falle findet man auf den Festplätzen (simbuang) gewöhnlich Steinblöcke aufgerichtet (wie früher erwähnt), die entweder ringförmig oder doppelreihig angeordnet stehen. An diesen Steinen werden die Opferbüffel festgebunden. In Tóndong benutzte man hierzu Holzpfosten."

A couple of similar stones GRUBAUER reports from Masarow-Mangura where he stayed for the night travelling from Masamba to Leboni. Of these he writes on page 338: "Wenig oberhalb des Lagerplatzes, auf einer grasigen Halde, stiessen wir auf zwei merkwürdige, offenbar von Menschenhänden hierher gesetzte Steine. In der Form glichen sie den Simbuang batu, wie ich sie in den Toradja-Landen kennen gelernt hatte. Hier allerdings dienten sie wesentlich anderen Zwecken. Die Stelle bezeichnet ungefähr die Mitte des Weges Masamba-Leboni, bedeutet also einen Abschlusspunkt, an dem es kein Eingeborener versäumt, den Geistern des Gebirges zu opfern, um deren Segen auch für den zweiten Teil der Reise zu erlangen."

In the district of Sekopada, situated on one of the sources of the Karama, the Wono, southwest of Kantewoe, stone mortars may be seen. A Salvation Army officer, Mr. ROSENLUND, who payed a visit to the district, told me in a letter he saw stone mortars, which at places were still used. This I mentioned in my Swedish book of 1921, Vol. II. p. 126.

KRUYT in his French paper of 1932 reports a stone vat from Wono in Pada-Seko.

SUMMARY

In the foregoing I have tried to make clear what is actually known at present about prehistoric stone objects from Central Celebes. Apart from the many natural stones to which the natives in several places attach certain legends, there remains a rather rich collection of stones worked by man in many different ways. In order to sum up the different types and their appearance in Central Celebes I have here below made out a table which in the main tallies with that given in 1921 in vol. II of "I Celebes Obygder," pages 145—147.

Table of Worked Stones from Central Celebes

- I. Stones which more or less resemble the natives' present paddy mortars of wood, with one or more hollows to place the paddy in. These stones have a more or less flat upper side with one or more round holes or hollows. They are called by the natives *batoe nondjoe* or *nondjoe dji*.
 - A. Rather small stones (about 50 centimetres in diameter) with only slightly polished upper side and a relatively small hollow, 10×4 centimetres (Koelawi).
 - B. Stones as a rule somewhat larger (60 to 100 centimetres) with a relatively well polished upper side with a hole or hollow about 15 to 25 centimetres in diameter and 12 to 16 centimetres deep (Paloe Valley, Palolo, Lindoe, Koelawi, Potonoa, Mopahi, Bada, Behoa, Secopada).

- C. Like the foregoing type except that the stones are definitely larger and contain two (Koelawi?) or more hollows (Lindoe).
- D. Like type B except that around the mouth of the hollow runs a circular groove, separated from the hollow by an upright edge or wall (Kantewoe).
- E. Like type B except for a low wall round the mouth of the hollow (Boelili in Bada).
- F. Approximately like B, except that the outer edge of the flat surface has a low upright wall or ridge. These stones are either rectangular (Koelawi) or round (Tawaelia).
- II. Deep, almost goblet- or cup-like, hollowed out stones. The hollow is about 17 centimetres in diameter and about 14 centimetres deep (Behoa and Bada).
- III. Stone blocks with a number of more or less rounded or irregularly formed hollows.
 - A. Rather large and not especially worked stones, with rather few (Kantewoe), or very many small, hollows on the upper side (Koelawi, Bada).
 - B. Rather small stones more or less flat with a diameter of 35 to 50 centimetres and with polished edges and a number of hollows in both the upper and under sides (Peana, Mopahi). These stones are called *w a t o e m o r o b e*.
- IV. Stones with a more or less oblong shallow hollow (Mopahi). These are also called *w a t o e n o n d j o e* or *n o n d j o e d j i*.
- V. Relatively large, slightly polished stone block with a very large hollow of the shape of an egg cup (Mopahi).
- VI. Flat stones with a shallow circular groove on the upper side (Kantewoe, Peana). The natives call them *w a t o e k o e l i l i*.
- VII. Large stone blocks with a more or less rectangular box-shaped hollow (Napoe, Mopahi).

VIII. Large, more or less cylindrical, stone vats called *k a l a m b a*.

- A. Plain without decoration (Bada, Behoa).
- B. Similar to the above in form but also equipped with a number of circular raised bands (Behoa).
- C. Similar to the above in form but with the addition of decoration in relief (Behoa).
- D. Some comparatively small, almost egg- or barrel-shaped stone vats, belonging also to the *k a l a m b a* (Behoa).

Perhaps one may include with the *k a l a m b a* the stone at Mopahi sunk in the earth in which a palm tree has taken root.

IX. Large, flat, more or less round, stones called *t o e t o e n a*.

- A. Round, flat stones without any other decoration than possibly a raised section in the center (Bada, Behoa).
- B. Round, flat stones decorated with incised patterns (Bada, Behoa).
- C. Round stones equipped with decorations in very high relief.
- D. Oval stones with low relief or incision (Jaentoe Valley).

X. Monolithic sculptures. These show rather many different variations in one or another respect, of which more later. (Napoe, Behoa, Bada, Leboni?).

XI. Reclining stone with human face sculptured at one end (Bada).

XII. Large, flat stone which rests on some smaller stones, possibly a kind of dolmen (Behoa).

XIII. Stones standing upright, so-called menhirs.

- A. Stone standing alone (Kantewoe, Peana).
- B. Two menhirs beside each other (Massarow-Mangura).

- C. Several upright stones in two rows (Saadang region).
- D. Stones ranged in a circle (Saadang region).

To this group belong apparently the five upright stones on the northern shore of Lake Poso. Perhaps one should also place here the four irregular stone blocks round the stone chest in Mopahi.

Table Showing the Size of the Kalamba

In the text I have already given the measurements of the various *kalamba* which I have measured myself as well as what information one can find in the literature treating the size of the *kalamba*. In order to give an idea of how large the stone vats are and within what boundaries the dimensions are found I have in the table on p. 133 collected all the measurements which I have taken.

As these measurements differ to some extent from those given in other researches I have here below summarized the information given in the latter regarding the vats in Behoa.

The Pokekea site.

KILIAAN. The largest vat is 1.75 metres high, 1.5 metres in diameter.

The smallest is 1.00 metre high, 0.5 metre in diameter.

KRUYT. The largest vat is 1.90 metres high, 7 metres in circumference.

South of Doda.

SCHUYT. *Kalamba*, fallen over. Diameter of the hollow about 1.20 metres, thickness of the wall 1.10 metres, depth about 1.5 metres.

The measurements do not tally with my own, especially in the case of SCHUYT's measurements for the fallen over vat which I saw in the immediate vicinity of Doda to the south.

(Measurements in centimetres)

District	Place	No.	Height over all	Height above the ground	Maximum circumference	Diameter of the vat	Diameter of the hollow	Thickness of the wall		Inner depth	Remarks
								at the top	lower down, near the bottom		
Behoa	Boeloe Léli north of Doda	I	160	—	—	175	122	27	—	107	fallen over
		I	—	97	—	181	135	23	—	135	
		II	—	150	—	118	88	15	30	103	
		III	—	120	—	—	115	16	—	125	
	South of Doda		150	—	—	115	87	13	—	82	fallen over
			160	—	—	—	—	20	—	85	
	SSE of Doda		—	170	—	145	105	20	—	—	
	Pada Pokekea		—	90	—	75	45	15	—	70	standing alone
			—	185	700	210?	160?	25	—	80	
			—	190	—	—	—	30	—	—	near the above barrel-like, one of 11 vats
			—	110	—	—	87	15	—	50	
			—	110	—	—	60 × 73	6	12	—	
Bada	Northwest of Bewa	I	—	—	—	—	84	10	—	98	
		II	—	about 30	—	176	140	18	—	125	
		III	—	—	—	—	147	—	34	—	
	North of Bewa		—	110	—	—	about 150	18	27	67	partitioned bottom
	Kolori		—	—	—	—	125	—	—	125	
	Badang-kaja		—	35	—	127	87	20	—	150	
			—	—	—	175	135	18	20	125	leaning

If one compares the depth and the diameter of the hollow for all the k a l a m b a, one discovers a rather wide variation and it seems that the depths of the Bada k a l a m b a are somewhat greater than those of the Behoa

vats, even if there are exceptions to this. It is possible that the variation in depth and diameter of the hollow is somewhat greater in the case of the Behoa vats. There seems to be, however, no recurring relationship between the two measurements. The deepest hollow found among the Bada *k a l a m b a* (150 centimetres) is also the narrowest (87 centimetres). In Behoa we find that the largest vat has a hollow with the largest diameter (about 160 centimetres) and a relatively shallow depth (80 centimetres).

<i>Diameter of the hollow</i> in centimetres		<i>Depth of the hollow</i> in centimetres	
Behoa	Bada	Behoa	Bada
45 to 50	87	50	67
60 to 73	84 to 89	70	98
87	125	80	125
87	135	82 to 85	125
88	140	103	125
105	147	107	150
115 to 125	150 (about)	125	
122		135	
135			
160 (about)			

<i>Diameter of the hollow</i> in centimetres		<i>Depth of the hollow</i> in centimetres	
Behoa	Bada	Behoa	Bada
Minimum 45	87	50	67
Average 101.8	124.3	94.2	115
Maximum 160	150	135	150

Table Showing the Size of the Covers

The available measurements for the so-called *k a l a m b a* covers are few and perhaps somewhat unreliable. All the covers appear to be rather large and those from Behoa and Bada appear to be to a large extent round while the definitely smaller ones from the Jaentoe Valley are oval.

Bada

Cover for k a l a m b a No. 1, north of Gintoe	about 200	centimetres in diameter
Cover for k a l a m b a No. 2, north of Gintoe	about 145—150	»
Cover for the broken k a l a m b a at Boelili	about 190	»

Behoa

Cover with four animals in a row	about 240	»
Cover with five animals in a circle.....	about 185	»
Cover with eight(?) incised faces ... (200)	215	»

Jaentoe Valley

Cover with human image	95×85	centimetres
Cover without decoration	85×70	»
Cover without decoration	95×85	»

Table Showing How the Images Face

In his work in 1908 KRUYT attached great importance to the direction in which the images faced, as he assumed that they were all turned more or less towards the north. This he considered proof of the fact that the ancestors of the natives had at one time wandered in from the north. I have pointed out in 1921 in my work "I Celebes Obygder," and in 1925 in my "Migrations in Central Celebes," how untenable this assumption is. In his paper of 1932 KRUYT has given some information about the directions in which a number of the statues face, which information only emphasises my contention that the images are not turned in any one definite direction.

In the table below I repeat the statements I made in 1921, complemented by those supplied by KRUYT in 1932.

Napoe:

- No. 1. Watoetaoe in the village of Watoetaoe, towards the east (KRUYT).
- » 2. Tomaboelopi, between Sabingka and Lamba, towards the southwest (KRUYT).
- » 3. Statue near Latandoe, deviates 20° towards the west from the south (KRUYT).
- » 4. Pekasele, at Winoa, towards the west northwest (KRUYT).

Behoa:

- No. 1. The image north of Doda called Tadoelako, faces almost due north possibly with a slight deviation towards the north; according to KRUYT, towards the north.
- » 2. Boeangke, towards the east (KRUYT).

Bada:

- No. 1. The fallen image north of the Tawaelia, lying on its back with its head to the northwest, so that it would have faced southeast if standing.
- » 2. The large standing statue north of the Tawaelia faces due west, possibly with a deviation of 2° to 3° towards the south.
- » 3. The Bomba image, Langke Boelawa, towards the north with a deviation of about 10° towards the west. According to KRUYT towards the north.
- » 4. Loga, near Pada, towards the south with a deviation of 12° or 13° towards the west. KRUYT: towards the south with a deviation of 15° towards the west.
- » 5. The image of Boelili, towards the east.
- » 6. The fallen image south of Gintoe would, when standing, have faced almost due west.
- » 7. The image near Tinoë, towards the north with a deviation of about 33° towards the east. According to KRUYT the deviation towards the east is 30° .

- No. 8. Watoe molindo near Badangkaja, towards the north (KRUYT).
 » 9. Image at Gintoe, towards the north with a deviation of 20° towards the west (KRUYT).
 » 10. Tosalogi, towards the southwest (KRUYT).
 » 11. The so-called stone "buffalo," towards the north with a deviation of about 12° towards the east.

Rampi-Leboni:

- No. 1. Timo'oni, towards the south (KRUYT).
 » 2. Image near Mbeloi, towards the southeast (KRUYT).

If the above data are given in degrees of a compass divided into 360° , and north is indicated by 0, we get, going with the sun, the following table illustrating the fact that the statues do not face towards any particular direction.

Bada	No. 8	0°
»	» 11	12° or 13°
Napoe	» 3	$22^\circ \frac{1}{2}$
Bada	» 7	33°
Napoe	» 1	90°
Behoa	» 2	90°
Bada	» 5	90°
Napoe	» 2	135°
Bada	» 1	135°
Rampi	» 2	155°
»	» 1	180°
Bada	» 4	193°
Napoe	» 3	200°
Bada	» 10	225°
»	» 2	258°
»	» 6	270°
»	» 9	340°
»	» 3	350°
Behoa	» 1	358°

Chronological Account of the Descriptions and Reproductions of the Stone Objects from Central Celebes

Because of the fact that a number of authors, as I have already pointed out, have taken little or no notice of what other researchers have done in the matter of describing and reproducing the stone objects, I have in the table below tried to make clear what objects have become known to science, and through which researchers. In classifying the objects I have followed the table on pages 129 to 132.

Type number	District and village	Authors and works	Described in	Drawing	Photograph
I A	Koelawi	KAUDERN: I Celebes Obygder ...	1921	—	—
	Lemo				
I B	Sigi				
	Batoenondjoe	ADRIANI and KRUYT: Van Posso naar Parigi Sigi en Lindoe.	1898	—	—
	Lindoe				
	Tomado	KAUDERN: I Celebes Obygder ...	1921	—	—
	Koelawi				
	Bolapapoe	KAUDERN: Structures and Settlements in Central Celebes	—	1925	—
	»	» Migrations of the Toradja in Central Celebes	1925	—	—
	Palempea				
	Potonoa	» I Celebes Obygder ...	1921	1921	—
	Mopahi	» » » ...	1921	1921	—
	»	» Migrations of the Toradja in Central Celebes	1925	—	—
	Bada				
	Boelili	KRUYT: Het landschap Bada in Midden-Celebes ...	1909	—	—
	»	KAUDERN: I Celebes Obygder ...	1921	1921	—
	Badangkaja	» » » ...	1921	—	—
	Gintoe	» » » ...	1921	1921	—

Type number	District and village	Authors and works	Described in	Drawing	Photograph
I B	Kolori Pada	KAUDERN: I Celebes Obygder ... KRUYT: L'Immigration Pré-historique dans les Pays des Toradjas Occidentaux	1921 1932	1921 —	— —
	<i>Behoa</i>	KRUYT: Nadere gegevens betreffende de oudheden aangetroffen in het landschap Besoa (Midden-Celebes) (No special locality given)	1908	—	—
	Pada Pokekea	KRUYT: De berglandschappen Napoe en Besoa in Midden-Celebes	1908	—	—
	Doda	» De berglandschappen Napoe en Besoa in Midden-Celebes	1908	—	—
	»	SCHUYT: Van dag tot dag op een reis naar de landschappen Napoe, Besoa en Bada	1911	—	—
	»	KAUDERN: I Celebes Obygder ...	1921	—	—
	»	» Structures and Settlements in Central Celebes	1925	1925	—
	Hanggira	KRUYT: De berglandschappen Napoe en Besoa in Midden-Celebes	1908	—	—
	Lempe	» L'Immigration préhistorique dans les pays des Toradjas Occidentaux	1932	—	—
	<i>Sekopada Wono</i>	» L'Immigration préhistorique dans les pays des Toradjas Occidentaux	1932	—	—

Type number	District and village	Authors and works	Described in	Drawing	Photograph
I C	<i>Lindoe</i>				
	Tomado	KAUDERN: I Celebes Obygder ...	1921	—	1921
	»	RAVEN: Stone Images and Vats of Central Celebes ...	1926	—	—
I D	<i>Kantewoe</i>	KAUDERN: I Celebes Obygder ...	1921	1921	—
I E	<i>Bada</i>				
	Boelili	» » » » ...	1921	—	—
I F	<i>Koelawi</i>				
	Londja	» » » » ...	1921	1921	—
	<i>Tawaelia</i>	» (After RITSEMA) I Celebes Obygder ...	1921	—	—
II	<i>Behoa</i>				
	Bariri	KAUDERN: I Celebes Obygder ...	1921	1921	—
	<i>Bada</i>				
	Boelili	» » » » ...	1921	1921	—
III A	<i>Koelawi</i>				
	Panapa	» » » » ...	1921	—	1921
	<i>Kantewoe</i>	» » » » ...	1921	1921	—
	<i>Bada</i>				
	Boelili	» » » » ...	1921	—	—
III B	<i>Peana</i>	» » » » ...	1921	1921	—
	<i>Mopahi</i>	» » » » ...	1921	—	—
IV	»	» » » » ...	1921	1921	—
V	»	» » » » ...	1921	1921	—
VI	<i>Kantewoe</i>	» » » » ...	1921	—	1921
	<i>Peana</i>	» » » » ...	1921	1921	—
VII	<i>Napoe</i>	KRUYT: De berglandschappen Napoe en Besoa in Midden-Celebes	1908	—	—
	»	RAVEN: Stone Images and Vats of Central Celebes ...	1926	—	1926
	»	KRUYT: L'Immigration Préhistorique dans les Pays des Toradjas Occidentaux	1932	—	—
	<i>Mopahi</i>	KAUDERN: I Celebes Obygder ...	1921	—	—

Type number	District and village	Authors and works	Described in	Drawing	Photograph
VIII A	<i>Behoa</i>				
	Boeloe Lèli	KILIAAN: Oudheden aangetroffen in het landschap Besoa Midden-Celebes	1908	—	—
	» »	KRUYT: De berglandschappen Napoe en Besoa in Midden-Celebes	1908	—	—
	» »	KAUDERN: I Celebes Obygder ...	1921	—	—
	» »	RAVEN: Stone Images and Vats of Central Celebes ...	1926	1926	1926
	» »	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	1932
	Doda	SCHUYT: Van dag tot dag op een reis naar de landschappen Napoe, Besoa en Bada	1911	—	—
	»	KAUDERN: I Celebes Obygder ...	1921	—	—
	Pada Pokekea	KILIAAN: Oudheden aangetroffen in het landschap Besoa Midden-Celebes	1908	1908	—
	» »	KRUYT: De berglandschappen Napoe en Besoa in Midden-Celebes	1908	1908	—
	» »	» Nadere gegevens betreffende de oudheden aangetroffen in het landschap Besoa (Midden-Celebes)	1908	—	—
	» »	KAUDERN: I Celebes Obygder ...	1921	1921	1921
	» »	RAVEN: Stone Images and Vats of Central Celebes ...	1926	—	1926
	» »	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	1932
	<i>Bada</i>				
	Kolori	» Het landschap Bada in Midden-Celebes ...	1909	—	—

Type number	District and village	Authors and works	Described in	Drawing	Photograph
VIII A	Kolori	KAUDERN: I Celebes Obygder ...	1921	—	—
	NW of Bewa	» » » » ...	1921	1921	1921
	»	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	1932
	N. of Bewa	KAUDERN: I Celebes Obygder ...	1921	1921	—
	S. of Gintoe	» » » » ...	1921	—	—
	Boelili	KAUDERN: I Celebes Obygder ...	1921	—	—
	Badangkaja	» » » » ...	1921	1921	1921
	<i>Napoe?</i>	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	<i>Mopahi</i>	KAUDERN: I Celebes Obygder ... (possibly one specimen)	1921	1921	—
	»	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux (three questionable specim.)	1932	—	—
	<i>Gimpoe</i>	» L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	<i>Toro?</i>	KAUDERN: I Celebes Obygder ...	1921	—	—
	<i>Mapaha?</i>	» » » » ...	1921	—	—
	<i>Jaentoe?</i>	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	<i>Sekopada</i> Wono	» L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
VIII B	<i>Behoa</i>				
	Boeloe Léli	KILIAAN as well as KRUYT both have observed these vats but do not mention the raised rings encircling them.	1908	—	—
	» »	KAUDERN: I Celebes Obygder ...	1921	—	—

Type number	District and village	Authors and works	Described in	Drawing	Photograph
VIII B	Boeloe Lèli	RAVEN: Stone Images and Vats of Central Celebes ...	1926	—	1926
	Pada Pokekea	KILIAAN and KRUYT have seen and mentioned these vats but do not comment upon their rings.	1908	—	—
	» »	KAUDERN: I Celebes Obygder ...	1921	—	1921
	» »	RAVEN: Stone Images and Vats of Central Celebes ...	1926	—	1926
	» »	KAUDERN: I Celebes Obygder ...	1921	—	1921
VIII C	» »	KILIAAN: Oudheden aangetroffen in het landschap Besoa (Midden-Celebes)	1908	1908	—
	» »	KRUYT: De berglandschappen Napoe en Besoa in Midden-Celebes	1908	1908	—
	» »	» Nadere gegevens betreffende de oudheden aangetroffen in het landschap Besoa (Midden-Celebes)	1908	—	—
	» »	KAUDERN: I Celebes Obygder ...	1921	1921	1921
	» »	RAVEN: Stone Images and Vats of Central Celebes ...	1926	—	1926
	» »	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	1932
	» »	KAUDERN: I Celebes Obygder ...	1921	1921	—
	» »	RAVEN: Stone Images and Vats of Central Celebes ...	1926	—	—
IX A	Behoa				
	Pada Pokekea	KILIAAN: (Probably not the one observed by KAUDERN and RAVEN)	1908	1908	—
	» »	KAUDERN: I Celebes Obygder ...	1921	—	—
	» »	RAVEN: Stone Images and Vats of Central Celebes ...	1926	—	—

Type number	District and village	Authors and works	Described in	Drawing	Photograph
IX A	<i>Bada</i>				
	NW of Bewa * * *	KAUDERN: I Celebes Obygder ... KRUYT: L'Immigration Préhistorique des Toradjas occidentaux	1921 1932	1921 —	1921 1932
IX B	<i>Behoa</i>				
	Pada Pokekea * »	KAUDERN: I Celebes Obygder ... KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1921 1932	1921 —	1921 —
	<i>Bada</i>				
	Boelili	SCHUYT: Van dag tot dag op een reis naar de landschap- pen Napoe, Besoa en Bada	1911	—	—
	»	GRUBAUER: Unter Kopfjägern in Central-Celebes	1913	1913	—
IX C	<i>Behoa</i>				
	Pada Pokekea	KILJAAN: Oudheden aangetroffen in het landschap Besoa, Midden-Celebes	1908	1908	—
	* »	KRUYT: De berglandschappen Napoe en Besoa in Midden-Celebes	1908	1908	—
	» »	» Nadere gegevens be- treffende de oudheden aangetroffen in het landschap Besoa (Midden-Celebes)	1908	—	—
	» »	KAUDERN: I Celebes Obygder ...	1921	—	1921
	» »	RAVEN: Stone Images and Vats of Central Celebes ...	1926	—	1926
	» »	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	1932
	<i>Jaentoe Valley</i>	* De steen Watoe Taoe in de Jaentoe-vlakte	1915	1915	—

Type number	District and village	Authors and works	Described in	Drawing	Photograph
IX D	<i>Jaentoe Valley</i>	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
X	<i>Behoa</i>				
	Boeloe Léli	KILIAAN: Oudheden aangetroffen in het landschap Besoa Midden-Celebes	1908	1908	—
	» »	KRUYT: De berglandschappen Napoe en Besoa in Midden-Celebes	1908	1908	—
	» »	» Nadere gegevens betreffende de oudheden aangetroffen in het landschap Besoa (Midden-Celebes)	1908	—	—
	» »	KAUDERN: I Celebes Obygder ...	1921	1921	1921
	» »	RAVEN: Stone Images and Vats of Central Celebes ...	1926	—	1926
	» »	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	Pada Pokekea	» De berglandschappen Napoe en Besoa in Midden-Celebes	1908	1908	—
	» »	» Nadere gegevens betreffende de oudheden aangetroffen in het landschap Besoa (Midden-Celebes)	1908	—	—
	» »	» L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	<i>Bada</i>				
	Badangkaja	» Het landschap Bada in Midden-Celebes	1909	—	—
	Gintoe	» Het landschap Bada in Midden-Celebes	1909	—	—

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Type number	District and village	Authors and works	Described in	Drawing	Photograph
X	Gintoe	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	S. of Gintoe	KAUDERN: I Celebes Obygder ...	1921	1921	—
	Bomba	KRUYT: Het landschap Bada in Midden-Celebes	1909	—	—
	»	SCHUYT: Van dag tot dag op een reis naar de landschappen Besoa en Bada	1911	—	—
	»	GRUBAUER: Unter Kopfjägern in Central-Celebes	1913	—	1913
	»	KAUDERN: I Celebes Obygder ...	1921	—	1921
	»	RAVEN: Stone Images and Vats of Central-Celebes.....	1926	—	1926
	»	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	Boelili	» Het landschap Bada in Midden-Celebes	1909	—	—
	»	SCHUYT: Van dag tot dag op een reis naar de landschappen Napoe, Besoa en Bada	1911	—	—
	»	GRUBAUER: Unter Kopfjägern in Central-Celebes	1913	—	—
	»	KAUDERN: I Celebes Obygder ...	1921	—	—
	»	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	Near Pada	KAUDERN: I Celebes Obygder ...	1921	—	1921
	» »	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	Near Tinoë	KAUDERN: I Celebes Obygder ...	1921	1921	—
	» »	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—

Type number	District and village	Authors and works	Described in	Drawing	Photograph
X	SW Bada	KAUDERN: I Celebes Obygder ...	1921	1921	—
	N. of Bewa (lying)	„ „ „ „ ...	1921	1921	—
	NE of Bewa (big, standing)	„ „ „ „ ...	1921	1921	1921
	Locality not given	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	<i>Napoe</i>				
	Between Sabingka and Lamba	„ De berglandschappen Napoe en Besoa in Midden-Celebes	1908	1908	—
	„	RAVEN: Stone Images and Vats of Central-Celebes.....	1926	—	1926
	„	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	In Watoetaoe	„ Het landschap Bada in Midden-Celebes	1909	—	—
	„ „	GRUBAUER: Unter Kopfjägern in Central-Celebes	1913	—	1913
	„ „	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	Near Watoetaoe	RAVEN: Stone Images and Vats of Central-Celebes.....	1926	—	1926
	Near Latandoe	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	Near Wanga	„ L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—

Type number	District and village	Authors and works	Described in	Drawing	Photograph
X	<i>Napoe</i> Near Winoa	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	Site not given	» L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
	?Between Napoe and Toro	KAUDERN: I Celebes Obygder ...	1921	—	—
	<i>Rampi-Leboni</i>	KRUYT: L'Immigration Préhistorique des Toradjas Occidentaux	1932	—	—
XI	<i>Bada</i> (so-called buffalo)	KAUDERN: I Celebes Obygder ...	1921	—	1921
XII	<i>Behoa</i> (?Dolmen)				
	Pada Pokekea	KRUYT: De berglandschappen Napoe en Besoa in Midden-Celebes	1908	—	—
	SE of Lempe	SCHUYT: Van dag tot dag op een reis naar de landschappen Napoe, Besoa en Bada	1911	—	—
XIIIA	<i>Kantewoe</i>	KAUDERN: I Celebes Obygder ...	1921	—	1921
	<i>Benahoe</i>	» » » » ...	1921	—	—
	Site not given	KRUYT: De Bare'e-Sprekende Toradja's Vol. I	1912	—	—
XIIIB	<i>Massarow-Mangura</i>	GRUBAUER: Unter Kopfjägern in Central-Celebes	1913	—	—
XIIIC	<i>Saadang Valley</i>	» Unter Kopfjägern in Central-Celebes	1913	—	1913
XIIID	<i>N. of Lake Poso</i>	KRUYT: De Bare'e-Sprekende Toradja's Vol. I	1912	—	—
	<i>Saadang Valley</i>	GRUBAUER: Unter Kopfjägern in Central-Celebes	1913	—	—

*Geographical Distribution of the
Megalithic Finds in Central Celebes*

In the text I have already explained where in Central Celebes the different megalithic objects appear and I have also tried to show this on a number of map sketches.

On the maps 13-15 I have tried to show the geographical distribution of each special type according to the data as yet known to science.

It would have been desirable in the matter of these distribution maps to have taken together all the megalithic finds in the whole of the island as one could perhaps thus have given some idea of how the megalithic culture of Central Celebes relates to that of other parts of the island.

However, I have refrained from attempting this, since the other parts of Celebes are in this respect in large measure altogether uninvestigated. One knows of course about the large stone chests from Minahassa, the so-called *t i w o e k a r* or *w a r o e g a*. In Mongondou in North Celebes I have myself seen some stones at Goeroepahi which to a great degree resemble the so-called *w a t o e n o n d j o e* or *n o n d j o e d j i*, and in Northeast Celebes I heard it said that there existed in that section a stone man, but if it was of the same type as the images in Napoe, Behoa, and Bada, or it resembled the stack in Ondae, I do not know, but from these statements alone it is not possible to draw any broad conclusions.

The *t i w o e k a r* graves are very different from all the worked stones in Central Celebes and one is no more sure that they belong to one and the same culture than that there is any connection between the stone mortars of Mongondou and those of Central Celebes.

The former are said to have been used up to rather recent times as mortars in which gold ore was pulverized before it was washed, but about the mortars of Central

Celebes we do not know anything but we assume that they were used for pounding some kind of grain.

Because of these facts, on the comparative distribution maps of worked stones from prehistoric times only those of Central Celebes have been taken into consideration.

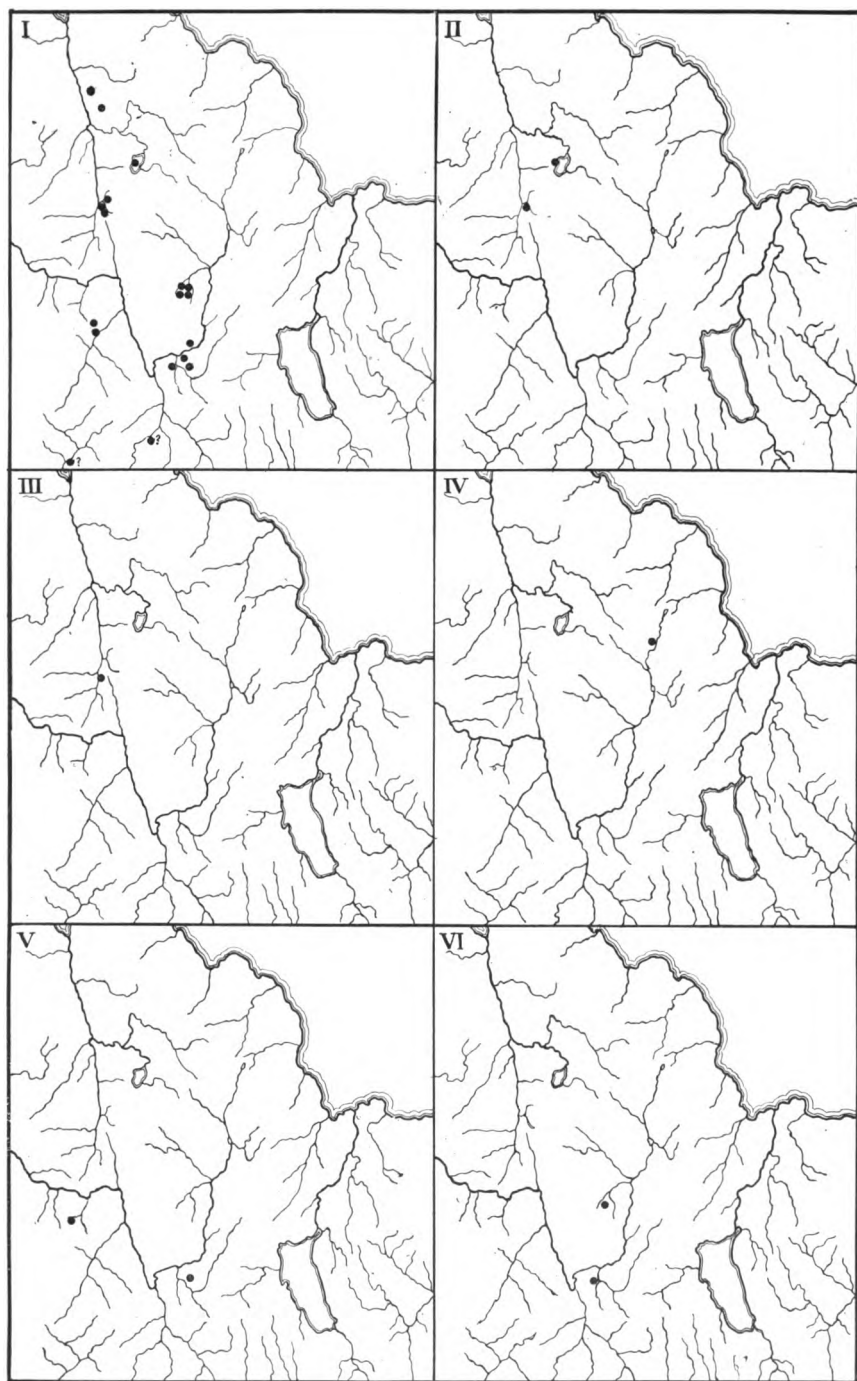
Map 13

On this map which is composed of six different maps, I have tried to show the distribution of more or less mortar-like stones, the so-called *watoe nondjoe* or *nondjoe dji*. From this map it appears quite clearly that the simple mortars (type I B) appear in several places in the region round the Koro and the Mioe rivers and their sources (Map section I). They appear especially numerous in Koelawi, Behoa, and Bada, but there must exist a great many more which have not been discovered. Section II of the map shows that mortars with more than one hollow (type I C) have so far been discovered only at Lindoe and Koelawi.

The sections of the map number III and IV show the distribution of mortars whose level upper side is bounded by an upright ridge (type I F). Strangely enough only two specimens of this type of mortar are known, of which one is rectangular (section III) and the other round (section IV).

On section V there is shown the distribution of the mortars the hollows of which are equipped with a circular groove (type I D), at Kantewoe, or with an upright edge (type I E), at Boelili in Bada. To what extent these are peculiar to their localities or whether similar ones exist at other places it is impossible at present to say. Only a very careful investigation and inventory can make clear the fact whether both types are unique and probably of more uncommon construction.

From section VI it appears that the goblet- or cup-like mortars (type II) have been found in two neighbouring districts, Bada and Behoa. Although I have not reproduced



Map 13 — Geographical distribution in Central Celebes of stone mortars. Section I, with one hollow; Section II, with several hollows; Section III, rectangular mortar lined by a low wall; Section IV, round mortar lined by a low wall; Section V, mortar the hollow of which is surrounded by a low wall, or by a groove; Section VI, goblet- or cup-shaped mortars.

more than one mortar from each place I am nevertheless convinced that, at least in Bada, there are several more.

From the six small maps it appears that simple stone mortars with one hollow have a comparatively wide distribution, while the mortars with several hollows and the goblet- or cup-like mortars have a distribution limited to two districts lying near together, in the former case Lindoe and Koelawi, and in the latter Bada and Behoa. Other types on the other hand appear quite sporadically with only one site for each kind.

Map 14

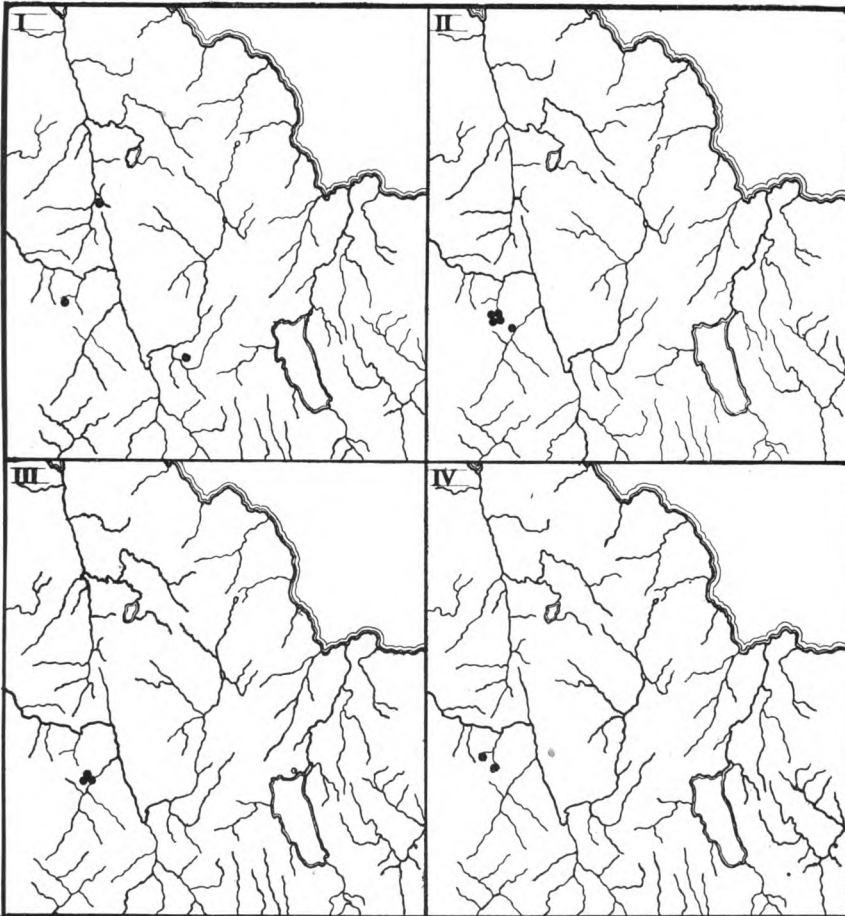
This map is composed of only four small maps and of these I to III show the distribution of stones which to a certain degree resemble the so-called *w a t o e n o n d j o e*.

Many stones are equipped with a number of round, or somewhat irregularly formed hollows. They can hardly have served as mortars in the same way as the above-mentioned ones.

On map section I there is given the distribution of large stone blocks, the upper sides of which are more or less covered with small hollows (type III A). The stones in Koelawi and Bada are rather similar to each other, while on the other hand the Kantewoe stone has only a few hollows.

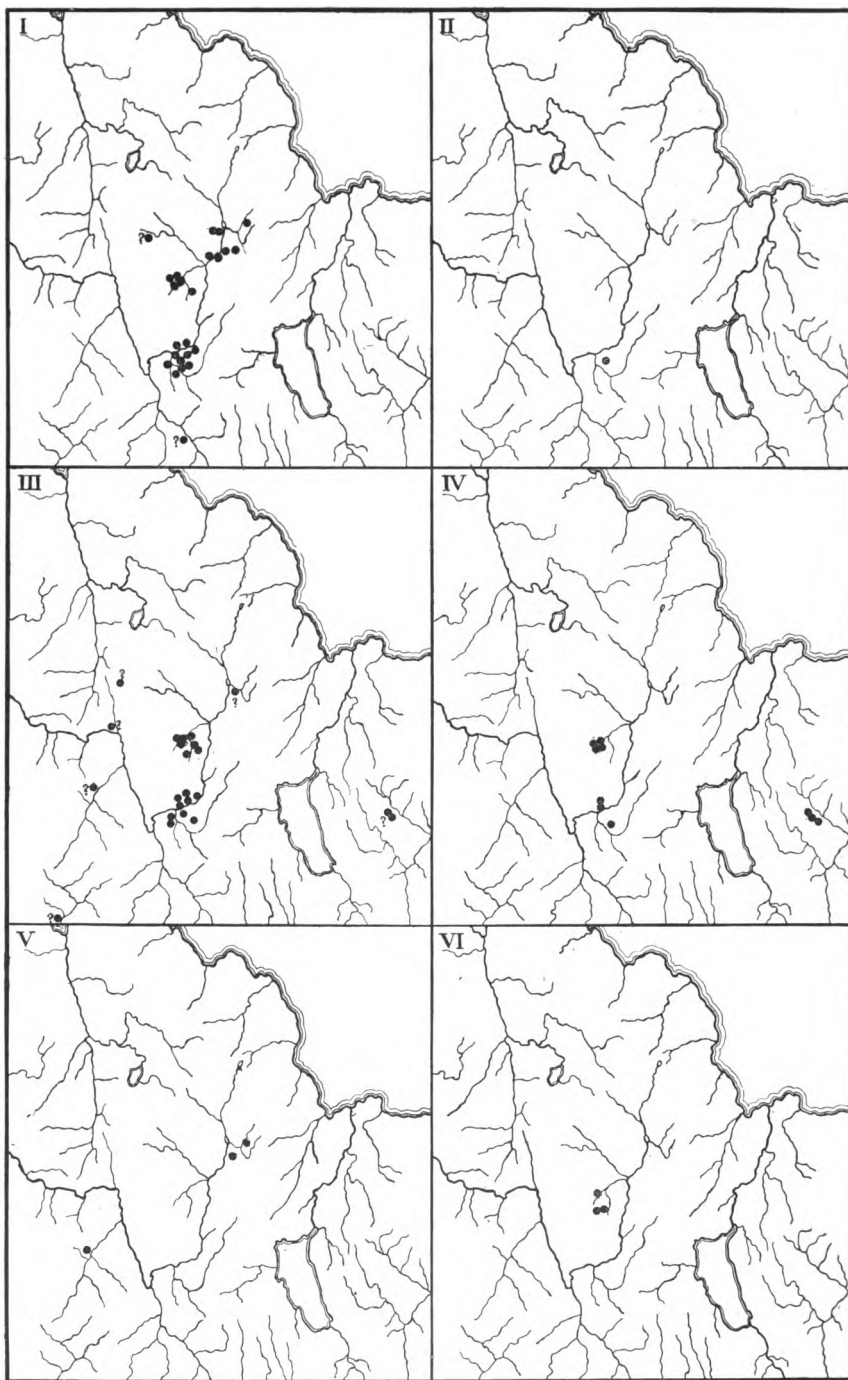
Section II shows that the comparatively small, flat stones with small hollows on both the upper and under sides (type III B) have a sharply limited distribution. All the specimens are from Peana, with the exception of one from Mopahi, which is not so far from Peana but that one can assume the stone also has come from this place. It does seem rather probable that this type has originated in Peana and has not spread very far.

One can say the same of the stones with one, more or less long and shallow, hollow (type IV) the distribution of which is shown on section III. From this it appears that such stones have been found only at Mopahi.



Map 14 — Geographical distribution in Central Celebes of stones with a number of small hollows, and of grinding stones. Section I, large blocks with small hollows; Section II, smaller stones with small hollows in the upper as well as in the under sides; Section III, grinding stones; Section IV, flat stone with circular groove.

Level stones with a circular groove have, similarly, a very limited distribution, in that up to now only two specimens have been observed. The two neighbouring villages Kantewoe and Peana each have such a stone (type VI).



Map 15 — Geographical distribution in Central Celebes of large stone monuments. Section I, statues; Section II, stone "buffalo"; Section III, circular stone vats; Section IV, covers for vats; Section V, stones with a hollow like that of a chest; Section VI, dolmens.

Map 15

On this map, composed of six small maps, the geographical distribution of several types is shown, nearly all of which have been observed in the districts on the upper Koro and its tributaries. They are especially frequent in three districts: Napoe, Behoa, and Bada, or Lore, a name which, according to KRUYT, these three districts have in common.

On section I we notice that monolithic stone images are rather common in Lore, and that only two specimens have been reported from a district south of Bada. Possibly there is a statue west of Napoe or northwest of Behoa. It is rather striking how very limited the distribution of the stone statues is, compared for instance to that of the stone mortars.

The two sections III and IV have much in common owing to the fact that the former shows the distribution of the *k a l a m b a*, and the latter of their covers, the *t o e t o e n a*. These two as a rule are observed together, at least it is the case that *k a l a m b a*, or remainders of such, are always observed at the sites of the covers.

Map section III shows that really cylindrical *k a l a m b a* are known to exist with certainty only in Behoa and Bada, and that similar vats may also appear at other places. The same may be the case with the covers, which, as is seen in map section IV, are only reported from Behoa and Bada, and possibly from the Jaentoe Valley, if we include in this group the oval stone slabs described by KRUYT. These are much smaller and of somewhat different character than the *t o e t o e n a* of Bada and Behoa.

Map section V illustrates the distribution of large stones, hollowed out more or less so as to look like a rectangular box (type VII). Of these, three specimens have been reported from Napoe, and a single specimen from Mopahi, a district in the west, rather distant from Napoe. It is, however, not certain that the Mopahi stone should be classified with those of Napoe, since its external form differs in many respects from that of the Napoe stone chests.

On map section VI are shown the sites of the three dolmens, both from Behoa, which have so far been observed in Central Celebes.

The geographical distribution of different kinds of menhirs is given on map 12.

The big stone at Mopahi with a hollow of the shape of an egg cup (type V) I have left out in this summary, since I have not observed any similar stones, and since one cannot take it for granted that the Mopahi stone is a finished work. It is not altogether inconceivable that it could be a *k a l a m b a* not quite finished.

A study of the data compiled on the fourteen maps showing the geographical distribution of the stone objects in Central Celebes, reveals the fact that there are a western and an eastern area. The former includes the districts on the Mio and its sources as well as those on the central part of the Koro and its tributaries, an area known as Pipikoro. The latter territory comprises the districts on the upper Koro, here called the Belanta and the Tawaelia, and its tributaries.

It appears that only very few stone objects are common to both areas. Some objects found in the western area have corresponding objects in the eastern one, but to a certain degree different, for instance the stone mortars, the upper side of which is bounded by a low ridge. In the west there is a rectangular mortar of this kind, of rather crude execution; in the east, a cylindrical specimen of good workmanship. The rectangular blocks of stone in Napoe, hollowed out like chests, as a matter of fact convey quite a different impression than the stone I observed at Mopahi.

Up to now proper cylindrical *k a l a m b a* have been observed only in the eastern area. Science knows no more about the *k a l a m b a* KRUVT has seen at Mopahi and Gimpoe than about the vat I heard of when I visited Toro.

The following table elucidates the remarkable distribution of the stone objects in the eastern and the western areas.

Objects Widely Spread over Almost the Whole Area

This group includes only the common stone mortars with a levelled upper side and a single hollow.

Objects Found in Single Specimens in the Eastern as well as the Western Area

Large blocks of stone with numerous small hollows in their upper sides.

Objects Chiefly Belonging to the Eastern Area but Possibly Appearing in Single Specimens or in a Variant in the Western Area

In this group belong (1) the *k a l a m b a* and (2) the rectangular blocks of stone hollowed out like chests.

Objects Only Observed in the Eastern Area

- (1) Stone mortar, the upper side of which is circular and bounded by a low ridge;
- (2) Stone mortar the hollow of which is encircled by a low ridge;
- (3) Stone mortars of the shape of a goblet or a cup;
- (4) Monolithic statues;
- (5) Lying statue ("buffalo");
- (6) Vat covers, *t o e t o e n a*;
- (7) Dolmens.

Objects Confined to the Western Area

- (1) Stone mortars with more than one hollow;
- (2) Stone mortar the hollow of which is encircled by a groove;
- (3) Stone mortar with rectangular upper side bordered by a low ridge;
- (4) Small flat stones with many small hollows in their upper as well as their under sides;
- (5) Stones with a long and shallow groove in their fairly smooth upper sides;

- (6) Flat stone with a shallow circular groove in its upper side;
- (9) In this group we might include the big block at Mopahi with a hollow like that of an egg cup.

To explain this rather strange distribution in Central Celebes of the prehistoric worked stones seems at present impossible considering our imperfect knowledge of the prehistoric cultures of this part of Celebes. If these stone relics should prove to belong pretty much to the same cultural period, this culture evidently has differentiated itself into a western and an eastern form.

No doubt it would have been of great interest to map out the geographical distribution of single menhirs as well as of those ranged in rows and in circles, but unfortunately the exact data supplied by literature on this subject are extremely meagre, as is seen from map 12 of this book.

COMPARATIVE SECTION

Styles and Types

In the collection of worked stones observed in Central Celebes there are some which vary rather much in detail, a matter illustrated in the foregoing by the tables on pages 129—133. As might be expected the objects which appear in the greatest numbers, are those which show the greatest variation. Examples of such objects are the mortar-like stones, the so-called *w a t o e n o n d j o e*, or *n o n d j o e d j i*; the stone vats, *k a l a m b a*, and their covers, *t o e o - t e n a*; and the monolithic statues.

Stone Mortars

In the group of stone mortars, called by the natives *w a t o e n o n d j o e*, (stone mortars) or *n o n d j o e d j i* (mortars of the spirits), we notice a series of variants from the small, simple, but slightly worked specimen from the ancient *b e n t e n g* in Koelawi (fig. 4) to the well-made, round, specimen from Tawaelia (fig. 18). Between these two, most of the stone mortars could be ranged in a perfect development series, but it seems rather doubtful if such a series really illustrates the development and improvements which the stone mortars of Celebes have undergone. The Tawaelia mortar, for instance, could very well be of a type introduced into Celebes comparatively recently, in which case it is no link in the development series of the stone mortars in Central Celebes. It seems just as doubtful that the cup- and goblet-like mortars (fig. 56 B, C) have developed from the common plain mortar type. One must not overlook

the possibility of their having been brought in from another country.

Should, however, all the mortar types prove to have originated in Celebes, I do not think it likely that they belong to different cultural periods. Even if the specimens of excellent execution belong to a later period than the bulk of simpler mortars, the latter in all probability have been made and used long after the introduction of an improved model. Conceivably the fine types of mortars have been, as it were, luxuries belonging to some great personage, or they may owe their excellent workmanship to the ingenuity of some single native, since there are so very few specimens. On the whole it is not possible to arrive at any reliable conclusions as to the relationship among the few mortars of which there is a really detailed description. We do not even know for certain what purpose they have been used for in Central Celebes. It is, however, a matter of fact that in modern times they have occasionally been used for husking paddy. A Salvation Army officer, Mr. ROSENLUND, reports in a letter to me having seen this in Sekopada and in Rampi in 1921. As mentioned in the foregoing I have myself observed a woman in Behoa in 1918 who was pounding some kind of grain in a stone mortar. From this we cannot, however, infer, that all stone mortars have been used for this purpose. I have already pointed out that the inhabitants of Mongondou, North Celebes, in the beginning of the present century used exactly the same kind of stone mortars to pulverize gold ore so as to be able to wash the gold out of it.

It seems most likely that the mortars of Central Celebes have been household articles, used in pounding or husking some kind of grain, but whether this was paddy, we do not know. A much more careful and systematic investigation than mine, in the field, would be necessary to solve the question of the origin of the mortar types and their functions.

Kalamba

In the table on page 131 I have ranged the *k a l a m b a* in four groups according to their form and appearance. In this table are included only the vats which the natives of Behoa and Bada call *k a l a m b a*, but not the more or less rectangular blocks, hollowed out like chests, which are found in Napoe and Mopahi.

Of the four groups, the last one, the fourth, deviates rather much from the majority of the *k a l a m b a*. As mentioned in the foregoing, these vats are small and barrel-shaped, in contrast to the majority, which are rather large and more or less cylindrical. The form and size of this barrel-shaped *k a l a m b a* from Behoa, corresponds, strangely enough, to a certain degree with that of the large clay pot which I dug out in Bada. Compare fig. 30 F with fig. 59.

I am not prepared to say whether the similarity between these two is merely incidental, or whether they have any significant connection with one another. In any case it seems likely that the two have been used for the same purpose, i. e. as burial urns. A close investigation based on extensive material would perhaps give an answer to this question.

As to the other three *k a l a m b a* types it seems a rather striking fact that all specimens decorated with circular raised rings as well as the one adorned with a series of human faces hail from Behoa. The vats of Bada all lack decorations. As to the origin and development of the *k a l a m b a*, the material observed in Celebes hardly can be said to supply any information, except possibly that the barrel-shaped type may be the oldest one, and an imitation in more lasting stuff of the huge clay pots. The bigger, more or less cylindrical vats might later on have developed from the barrel-like type, but in this case it is strange that no intermediate forms have been observed.

It may therefore be just as likely that the use of vats, with or without ornaments, cylindrical or barrel-shaped, is

not from the beginning Celebean, but has been introduced into this island from abroad, even if there is a certain degree of differentiation in the vats in Central Celebes, those of Bada all being plain, and those of Behoa in many cases being ornamented. If the *k a l a m b a* are of foreign origin it seems doubtful whether the barrel-shaped vats have any direct relationship with the huge clay pots.

At present it seems altogether impossible to give an answer to this question. Without a careful archaeological investigation in Central Celebes no reliable results can be obtained. To declare, as does KRUYT in his paper of 1932, that the clay pots and the *k a l a m b a* belong to different cultures, and have been brought in by different migrating peoples, seems to me merely desk fancies, since we do not even know for certain anything about the age of the *k a l a m b a*, or the purpose they served. Some authors have, however, suggested that they might be a kind of sarcophagi. As to the clay pots nothing is known about their age either. No artefacts connected with them have as yet been observed, and in the absence of such we are left in the dark as to the period or culture they belong to.

Kalamba Covers

In my table on page 131 I have ranged these stones in four groups according to their shapes and ornaments, but it would not be wise to base any extensive conclusions on such limited material as that available at present, in all, eight specimens, or if we include the three in the Jaentoe Valley, observed and described by KRUYT, eleven specimens.

One has assumed, and rightly, I think, that the *t o e - t o e n a* once served as covers for the *k a l a m b a*, although at present the majority are lying on the ground. In one case, however, in Bada, there is a cover still on top of a vat, but slightly out of place (figs. 45 and 46).

A remarkable fact is the great disproportion between the number of vats and covers. It would seem as if the majority of the *k a l a m b a* had not possessed any stone covers, but if the *k a l a m b a* have been used to hold the bodies of the dead, or sepulchral urns, or other objects, it seems likely that they have had some kind of cover to protect the contents at least against the tropical rains. If all the *k a l a m b a* originally had stone covers, these in some way or other must have been removed from the place, since there are no traces even of broken covers near the vats. Neither in Bada, nor in Behoa did I see any *t o e t o e n a*, whole or broken, used by the natives for any practical purposes in their villages. I cannot help thinking that the disproportion observed between the vats and the stone covers should not be attributed to any activity on the part of the natives. I believe the present state of things is original and that there have never been stone covers for all the vats.

In this connection I wish to call attention to the fact that neither *K R U Y T*, nor *R A V E N* has observed any covers for the rectangular stone chests of Napoe. At Mopahi I saw no stone, or stone fragments, near the stone chest I discovered, which I could take to be a cover for it. In all probability the majority of the *k a l a m b a* originally were equipped with some kind of covers, but I imagine they were made not of stone but of some less solid material; if they had been made of wood, or of the material used as roofing in the huts, the covers would long ago have crumbled to dust and disappeared.

It is a remarkable fact that round some *k a l a m b a* the ground is strewn all over with shards of some kind of crude earthenware, possibly the remainders of pots which may originally have been standing in the stone vats. I have mentioned in the foregoing that *R A V E N*, in a vat he inspected, discovered some pieces of a broken clay pot. This would mean that nearly all *k a l a m b a* have been plundered of their contents.

There is still another possibility. The majority of the covers were made of clay and the shards observed on the ground near the vats, the remainders of the covers. It would perhaps seem absurd to assume that the natives were able to make such gigantic covers of clay, but technically impossible it probably would not have been for the makers of such very large pots as the one I dug out in Bada. At all events it would be of great interest to collect all the shards in a certain place, put the pieces together and make a reconstruction of the object. In this way it would be possible to ascertain whether the shards are parts of pots or covers.

Statues

In many respects similar to one another the stone statues nevertheless have their points of difference. In my tables I have refrained from ranging them in groups, since I myself have only seen one of the Behoa images and a few of those of Bada, and since many of the images observed by other workers have not yet been shown in illustrations.

Earlier authors have already called attention to the dissimilarities of the statues. KRUYT in 1908 comments upon the shapes of their eyes. In Napoe and Behoa some of the images have round, others oval and slanting eyes. KRUYT attributed this difference to a difference of sex. Those with oval and slanting eyes, he regarded as representing men, those with round eyes, women. The same author has also observed the arched decorations on the chest of several of the statues. In his paper on Bada, in 1909, KRUYT presents the opinion that all the statues face north.

In "I Celebes Obygder," the present author contested KRUYT's theory that round eyes belong to images representing women, oval and slanting eyes, to men, as well as his suggestion that all the statues face towards the north. The author also called attention to the rather remarkable fact

that the stone images do not show any progress of the art, from a simpler to a more perfect form. They convey an impression of having been made by a people well experienced in the art of sculpture when they arrived in Celebes.

In his paper of 1926 RAVEN makes a comparison between the images of Napoe, Behoa, and Bada. On page 274 he writes as follows: "The images in Bada and Besoa resemble each other closely in the matter of the breasts, ears, headdress and position of the hands, and perhaps in the phallus. The Napoe images differ from those of Bada and Besoa in the apparent lack of headgear and the lack of arms and hands. A mouth is not shown in the figures of Bada and Besoa, but my photographs show in each case what may be a slight groove below the nose, suggesting a mouth."

KRUYT in his paper of 1932 in French, adds some data to those presented in his earlier papers. He says the image at Mbeloi (Rampi) has some ornaments on its face, and that the face of an image at Wanga (Napoe) has an ornament like a moustache. He also mentions the pattern of hooks on the breast of some images. As to the directions towards which the images face, he here points out that these vary very much. To the shape of the eyes he still pays considerable attention, but now presents the opinion that the difference in shape should be attributed to a difference in race. To this question I shall come back in the ensuing chapter. He is of the opinion that the statues on the whole are much the same. On page 3 he says: "En principe elles montrent toutes le même type. Les jambes ne sont pas gravées dans la pierre et, si les bras sont indiqués, ils sont appliqués en relief des deux côtés du corps. Les parties génitales de quelques-unes sont taillées, de sorte qu'on peut savoir si l'on a à faire à un homme ou à une femme."

It is evident from what has been said above that the images of Napoe differ from those of Bada as well as of Behoa by their lack of arms. Some Napoe and Behoa statues have in common a hook-like pattern on the chest, a decoration

which does not seem to appear on the Bada statues. The manner in which the arms are rendered is the same in the images of Behoa and Bada. Some Bada images have a head band, a feature not yet observed in any statues in Behoa or Napoe.

All this makes it seem likely that the art of sculpture in question, even if it had reached a high standard before it came to Celebes, has been subject to a certain degree of development in the island itself.

Motives and Ornamentation

Of the megalithic objects only the *k a l a m b a*, the *t o e t o e n a*, and the statues have been adorned with ornamentation, and with very few exceptions the motive has been man. Geometrical patterns are rare. I myself have only once observed such a pattern, on a broken *k a l a m b a* cover at Boelili, Bada, mentioned in the foregoing: an inner circle of presumably eight heart-shaped figures ranged round a central knob, and an outer circle of what looks like four-petalled flowers, each flower consisting of four small ellipses. What these are meant to represent I do not know, but a similar pattern I observed in the districts called Pipikoro, where the natives call it *t e l i n g a t e d o*. To the heart-shaped figure I shall come back later on in this chapter.

The sculptors do not seem to have tried to attain any likeness in their images, all of which are simple and highly conventionalized, even those of excellent execution such as the monkey-like animals in high relief on the two stone covers in Behoa. The face as well as other parts of the body are in the monolithic statues executed in low relief. The same is the case with the faces on the very large *k a l a m b a* in Behoa, the face of the so-called stone "buffalo" in Bada, and the human form of the stone observed by KRUYT in the Jaentoe Valley. The patterns on a *t o e t o e n a* in Behoa,

and that of the above mentioned cover at Boelili, as well as that of a stone chest in Napoe, are engraved on the stone.

For what purpose all these stone statues in Central Celebes have been made, we do not yet know. It may be that they are monuments made and erected in honour of great personages, so-called ancestral figures. Like most of these and other representations of man made by primitive peoples, the statues of Central Celebes are nude. A few images have, however, some kind of headgear. There is a considerable variation of shape and size noticeable in the statues. Some are made from rather thin blocks, for instance in the case of the gigantic statue north of the Tawaelia, Bada, and the fallen image south of Gintoe, Bada. The fronts have in these cases been worked out carefully, the backs left rather uneven and rough. The backs as well as the fronts of certain other images have been subject to careful treatment. Such statues are *Langke Boelawa* at Bomba, *Loga* near Pada, and the statue near Tinoë, all in Bada. The latter image is twice as broad as it is thick. *Langke Boelawa*, like the statue north of Doda, *Tadoelako*, is almost cylindrical.

A remarkable feature in the statues is that they have no legs. GRUBAUER, when speaking of the image of Watoe-taoe, Napoe, says it shows "die Formen einer hockenden menschlichen Figur." This seems strange considering the absence of legs.

In most statues there is but a slight suggestion of a neck; the treatment of the trunk is elaborate, nipples and generative organs being clearly shown. Some images in Napoe and Behoa have on their chests a strange pattern suggesting hooks (fig. 27). In my book in Swedish, in 1921, I presented the theory that it might be a conventionalized representation of the median line of the chest, which with the natives often clearly stands out beyond the muscles of the belly. The narrow, central part of the ornament would then correspond to the *processus xiphoides*, which often

shows on the bodies of the natives, never encumbered with too much fat. A fact speaking in favour of my theory is that the upper and inner part of the decoration imperceptibly merges into the surface of the body; on the other hand it is difficult to explain why the opposite ends of the hooks, at least in the case of Tadoelako, bend towards the nipples.

RAVEN suggests that the hook-like pattern might be tattoo and compares it with designs for tattooing formerly used by the natives of Easter Island. The resemblance is not very striking, though, the points of the hooks in the Easter Island design being towards the median line of the breast, and no figure suggesting the *processus xiphoides* being present. This is often shown in sculptures from the islands of the South Sea, for instance in Malangan images from the Bismarck Archipelago (fig. 72 A) and in wooden statuettes from Easter Island (Fig. 72 B).

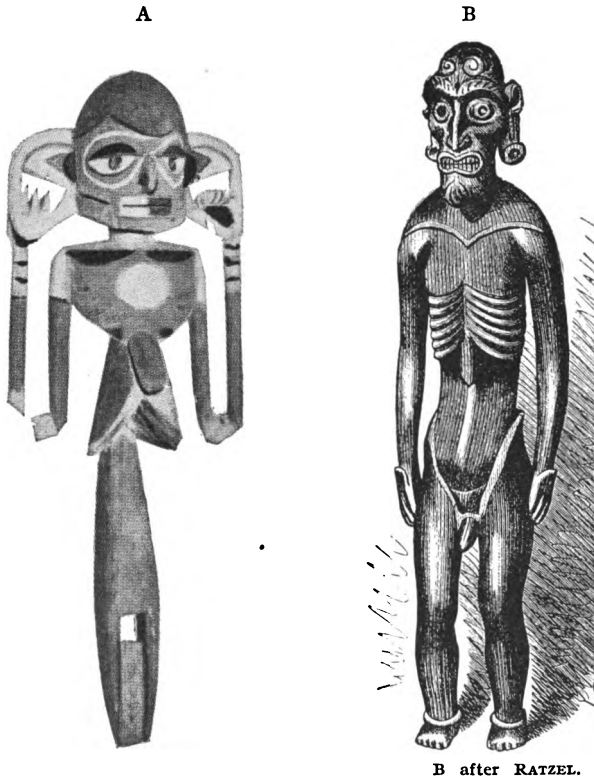
It seems rather strange that in one image in Behoa (fig. 25 A) as well as in two statues in Napoe (figs. 19 B and 21) the shoulders appear to continue in the upper part of the arms. Whether they have had arms or not is a question I must leave open for the present.

That a mouth is not shown in the majority of the statues, and if shown, is very small, certainly cannot be a merely casual feature. We know that primitive peoples often have the custom of making arrangements to keep the mouth of the deceased closed. If the Celebean statues represent great personages, the leaving out of the mouth may only be a simple method to prevent them from speaking.

Another interesting feature are the eyes. As mentioned in the foregoing the outlines of the nose merge into eyebrows. In the angle of the low area between the eyebrows and the nose, the eyes are shown in low relief, either round, or more or less oval, and in the latter case as a rule slanting.

KRUYT who first attributed the different shape of the eyes to a difference in sex, in 1932 presents the theory that

the statues with oval and slanting eyes suggest a Mongolian race, presumably related to the Japanese, those with round eyes, the aborigines of the country. On page 3 he says: "Cependant nous sommes bien obligés d'admettre que les



B after RATZEL.

Fig. 72 — Wooden sculptures from Oceania. A, so-called *Malangan* figure from Bismarck Archipelago (Gothenb. Mus. No. 32. 20. 7); B, from Easter Island.

Tailleurs de Pierre auront voulu représenter deux types humains différents. Il s'ensuit donc qu'on peut admettre que les yeux ronds (une seule fois ovales) indiquent la race déjà présente et que les yeux obliques sont ceux des immigrants. Les yeux obliques caractérisent la race mongole, il

est vraisemblable que nous avons par là un indice permettant de croire que les Tailleurs de Pierre ont pénétré dans le pays par le Nord, probablement de la direction du Japon. Surtout parmi les habitants de Lore (Napou, Besoa, Bada) on trouve encore à présent beaucoup de gens à la physionomie mongole."

I cannot see that there are any facts speaking in favour of this fantastic theory. Even if we should characterize the Mongols as a race with slanting eyes, which is a truth with reservations, a human race with round eyes is not yet known to exist.

I do not believe that the fact that there are found both round eyes, and oval, slanting eyes in the statues has any racial meaning. It seems much more likely that the sculptors in executing the eye, have shown different parts of the organ. The oval, slightly slanting eyes of some statues in all probability represent the oval, or elliptical part of the eyeball which shows between the eyelids when the eyes are open; the round eyes, the iris, the most important and eloquent part of the eyes. In some cases the sculptor has also shown the pupil of the eye by making a small hollow in the center of the iris (figs. 21 and 64, 65). A pupil does not appear in a single statue with oval eyes.

It does not seem impossible that oval eyes belong to an earlier artistic trend, and that round eyes, occasionally with a pupil, represent a progress of a later date when the sculptors had learned how to give more life to a face.

Of the dress worn by the prehistoric people to which the sculptors belonged, the stone images supply but a few hints. In three statues in Bada and in one image in Behoa some kind of headgear is shown. Judging by the two statues representing men and standing on the plain north of the Tawaelia, the men at that time wore a rather broad head band. The Bomba image, a woman, has a string of beads above her forehead, presumably according to the fashion of the era of the stone images.

The present inhabitants of Bada do not use these kinds of headgear. The men always wear on their heads nicely painted kerchiefs of bast cloth, and the women, various kinds of rings and bands, in most cases made from bamboo cane, but not of beads. The women of the Tole tribe, however, living in an inaccessible mountain district on the Mokoë where it empties into the Koro, wear round their heads a single string of big blue, white, and black beads, strongly recalling the headgear of the Bomba statue called *L a n g k e B o e l a w a*, Golden Anklet.

It is rather strange that a statue in which no legs are shown should be called *G o l d e n A n k l e t*. It seems as if the name referred to a lady conspicuous by her golden anklets, luxuries unknown to me, however, from Central Celebes. In this region girls often wear anklets plaited from strips of vegetable fibre as well as brass anklets. From the island of Boeton southeast of Celebes, I have in my collection childrens' silver anklets.

The men of a rather primitive and possibly veddoid tribe, To Pekawa, living in the high mountains to the west of the Paloe Valley, like the stone statues, wear a rather broad band of bamboo cane on their heads. According to a Salvation Army officer, who visited these natives in 1918, both sexes had almost no clothes.

At Bae Bae on the island of Boeton, southeast of Celebes, I observed on two occasions among natives called in to do day-work for the Dutch Government, men wearing a band of bamboo cane on their heads. These men conveyed the impression of being of a very low type. It would almost seem as if a bamboo head band had once been common all over Celebes as headgear for men, and belonged to an era earlier than that of the Toradja. It would, however, be precipitate to infer from this that the stone sculptors belonged to such a primitive race as the veddoid one, even if it formerly was of more importance in Celebes than at present. This may not be altogether impossible, but such a question as

this could be answered only by investigations in the field.

Some statues give a few hints of how the hair was dressed at the time when the images were made. I have mentioned in the foregoing that in GRUBAUER's photograph of the statue at the village of Watoetaoe, two bumps are seen on top of the head, possibly suggesting two knots of hair (fig. 20). The statue T a d o e l a k o, north of Doda, has a sharp line which separates its forehead from the top of the head. The crown is slightly undulating, like wavy hair. The high top of the head of L a n g k e B o e l a w a might, together with the string of beads, be interpreted as some kind of coiffure, kept in place by the string of beads. In the hill districts of the western part of Central Celebes the women do up their hair in this manner. They comb it from the back of the head, gather it in front in a pad which is twisted to the left, passed over the back of the head and from the right side formed into a roll over the forehead. No hair-pins are used, but the hair is kept in place by a hair band of the pattern characteristic of the district. When the women dress up, they try to make a big roll of hair above their forehead, which is considered attractive. The statue near Tinoë (fig. 66 B, B¹), and possibly also L o g a, near Pada, suggest that men at that time had their hair cut short.

There are three objects adorned with incised patterns. One is a stone vat in Napoe (fig. 23), another a cover for a vat in Behoa (figs. 41 and 42) and the third a broken cover in Bada (figs. 60, 61, 62: 14, 15).

The figures engraved on the outside of the Napoe vat reproduced by KRUYT, seem to belong to quite another culture than the two k a l a m b a covers, judging by the motives as well as by the execution of the figures. Not having seen the Napoe vat myself, it is difficult for me to pronounce an opinion on it, but to me the incised figures convey an impression of being of later date than the vat

itself. Compared with the patterns observed on the two covers, they are extremely awkward and of very poor execution.

A study of the two *toetoe na* is rather interesting, since it reveals a certain correspondance between them. In the foregoing I have mentioned that the cover I saw in Behoa which is illustrated in fig. 40, is a big disc, the greater portion of which is covered with earth. A series of presumably eight faces are ranged in a circle round its edge. The heart-shaped figures encircling the Boelili *toetoe na* in all probability also are eight. In 1921 I compared the latter figures with a pattern carved on an old temple drum which I observed in Lindoe, northeast of Koelawi. Among the carvings which cover it there is one representing a man, two showing a face, and several more or less heart-shaped figures. An examination of all these figures reveals the fact that even the most conventionalized ones, which look like a Roman five, can be derived from the human face (fig. 62: 1—13). The step from the pattern engraved on the cover in Bada to that of the old temple drum as shown in fig. 60:10 is not greater than that the pattern on the cover can very well be interpreted as a series of human faces, a suggestion confirmed by a comparison with the figures of the Behoa cover.

Animals used as motives seem to be scarce in the megalithic culture. The only examples I know of are the two covers with monkeys in Behoa and the stone vat in Napoe, illustrated by KRUYT in 1932, on which several quadrupeds are engraved. This I have not seen myself and for this reason refrain from discussing. That the animal sculptures on the covers in Behoa really are meant to represent monkeys, is perhaps not quite certain. KILIAAN who first described them suggested they were dogs. This KRUYT corrected in 1908, saying the animals were monkeys. RAVEN also holds the animals to be monkeys. In my book "I Celebes Obygder," I did not pronounce any opinion as to what the sculptures were meant to represent and confined

myself to the statement that the natives of the district consider them to be monkeys.

KRUYT in his paper of 1908, "De berglandschappen Napoe en Besoa," still is quite positive about the sculptures being monkeys. He says: "Deze apenfiguren komen geheel overeen met die, welke de Toradja's gewoon zijn uit te snijden in den middelsten zolderbalk hunner tempels (lobo)." The editors of the periodical point out that the animals in question may be frogs. They write as follows: "In hoeverre bij de steenen deksels, met hun zonderlinge versiering van 5 dierfiguren concentrisch geplaatst om een knop in het midden, gedacht mag worden aan invloed der versiering op de in den oostelijken Ind. Archipel vrij verspreide bronzen keteltrommen, met op de deksels veelal 4 kikvorschen concentrisch geplaatst om een knop in het midden, kan moeilijk gezegd worden. De mogelijkheid is echter aanwezig en moest dus even ter sprake komen."

Noteworthy is the fact that the buffalo head and horn as a motive has not yet been met with on the megalithic objects. In the art of the present day they are by far the most common ones. In my book of 1921 I have discussed this problem, and a translation into English of what I said at that time is given below.

"All attempts to discover on the stone objects any ornaments based on the buffalo head, proved fruitless. Nor have the generative organs of man, which frequently are represented in wooden sculpture of the present age, served as motives to the artists of the megalithic era.

It is true that the natives call the stone image lying in the sawah south of Gintoe, a buffalo, but as a matter of fact there is nothing about it suggesting a buffalo, a human face, like that of the statues, being sculptured at one end of it. The "buffalo hoorn" on a stone near Doda proved to be a work of nature, and not of human hands.

The reason why the buffalo motive is absent on the stone objects, is, that in all probability the buffalo was not of the same importance to the natives of the stone age as it is to the present inhabitants of Central Celebes. It may not even have been known to the former, that is to say, that at least the stone images, the *k a l a m b a*, and the *t o e t o e n a* of Bada, Behoa, and Napoe which all seem to belong to the same culture, date from a period previous to that which brought the buffalo to these districts.¹

The buffalo horn incised on a stone in Rampi, south of Bada, observed by a Salvation Army officer, Mr. ROSEN LUND, I have not had the opportunity of examining myself. We cannot take it for granted, however, that it really is a representation of the buffalo horn. It might be some other animal, for instance the small buffalo of Celebes, called *s a p i o e t a n* (oxen of the forest), or perhaps the goat. The natives of Rampi may, similarly to those of Bada and Behoa, be inclined to see representations of the buffalo horn in various scrolls.

The cultivation of paddy on sawah is closely connected with the buffalo, an animal indispensable for the process of treading the ground of the paddy fields when they are flooded before the paddy plants are set in the mud. Presumably the people of the stone carvers did not grow paddy on *s a w a h*. They may have grown it on ground cleared with fire, if they knew this kind of grain at all which may be questioned. Stone mortars are not suitable implements for husking paddy, a fact commented upon by KRUYT. In the case of maize, stone mortars are much better than wooden ones in which the hard maize grains will scatter without being crushed. The present inhabitants of Pipikoro put a flat stone in their wooden mortars when pounding maize to flour or grits. Since maize may be a plant of

¹ In his paper in French in 1932, page 4, KRUYT has adopted this theory but neglects to mention that it was presented by the present author in 1921.

comparatively recent date in Central Celebes, it would not be safe to infer that the stone mortars were used for pounding maize. Originally they may have been used to crush the big, hard grey seeds of a plant I often observed on the slopes of the hills in Kantewoe and Tole, grown on land cleared with fire. I also saw it in Koelawi where the natives called it *rope*.¹

There is one more reason which speaks in favour of the presumption that the stone sculptors, at least those living in Behoa, did not grow paddy on wet fields at the time when the *kalamba* were made. Where the plains are found at present in the hill districts, there must originally have been lakes, and this is certainly the case of the swampy plain in Behoa, nowadays partly used for sawah. A study of the sites of the statues and the vats reveals the fact that not a single specimen is found in, or near, the villages on the plain, as for instance Bariri. They are all rather high up on the ridges, as for instance in the case of Doda, or on the terraces or tounges of land which stretch from the high mountains towards the low and swampy ground.

The explanation seems to be that the plain at the time when the stone monuments were made, still was the bottom of a lake.² Noteworthy also is the fact that in Behoa so many old villages are built high up on the slopes of the ridges surrounding the plain, while the majority of the more recent villages are located on the plain or in its immediate vicinity.

If we assume the area at present partly occupied by sawah, partly still a swamp, to have been occupied by a hypothetical lake, this would divide Behoa into a north-

¹ In his paper in French in 1932, p. 8, KRUYT has adopted this theory but neglects mentioning that it was presented by the present author in 1921.

² In his paper in French of 1932, p. 9, KRUYT has adopted this theory but neglects mentioning that it was presented by the present author in 1921.

western and a southeastern portion, and in these two sections the majority of the stone objects are located.

There is still another fact corroborating the theory that the northwestern and southeastern parts of Doda have been separated from one another until recently. Two languages, or rather dialects, are spoken in Behoa, so that the teacher stationed at Doda has to learn the dialect spoken in this village and its vicinity, his colleague in Bariri, the other dialect spoken in the villages of the northwestern part of Behoa.

If, at the time of the stone sculptors, the Doda plain was a lake, there is the possibility of the natives having grown paddy on wet fields on the higher tongues of land, but this seems rather unlikely, since no traces of terraces and irrigation can be observed.

The sites of stone mortars in other districts, for instance Koelawi, make it clear that the people who used these mortars did not grow paddy on sawah. The present inhabitants of Koelawi always have their paddy barns on the plain along the edges of the sawah, and here the paddy is husked in big wooden mortars. Not a single stone mortar has been observed near the sawah. Such are met with on the top of the Bolapapoe ridge where the old villages of Panapa and Bolapapoe are located, as well as on another ridge where there is a village called Lili.

If in Koelawi the natives of the stone age had grown paddy on sawah, one could have expected to come across stone mortars chiefly on the plain, but if they had their gardens on the northern and western slopes of the Bolapapoe ridge, it is quite easy to understand the positions of the stone mortars. It seems quite likely that at that time the present sawah of Koelawi, especially its low western part, still was a lake or a marsh.

The stone mortars observed at Potonoa, at Mopahi, as well as those said to be found in Toro, are located on hills and not in the vicinity of ground that could have been

used for sawah. Exceptions are the mortars located on the plain south of Gintoe, Bada. The Bada plain evidently became dry earlier than that of Behoa, and it may have been inhabited at a period when the latter was still under water."

When and How the Megalithic Culture in Celebes Appeared

A number of scientists have expressed themselves regarding the origin of the megalithic culture in Celebes. KRUYT in his work of 1908, "De berglandschappen Bada en Besoa in Midden-Celebes," was not able to give any solution for this question, for which reason the editors of the periodical made a note on this subject, in which they drew the conclusion that the megalithic finds should be considered as indigenous products made by the forefathers of the Toradja people.

In 1909 in his paper, "Het landschap Bada in Midden-Celebes," KRUYT expresses the opinion that these stone sculptures may have been produced by a Caucasian people who had immigrated from the west, a theory which he based on MACMILLAN BROWN's work "Maori and Polynesian, their Origin, History and Culture." In this book the author presents the hypothesis that a Caucasian, or Semi-Caucasian people of Aryan speech from the Mediterranean countries had wandered eastward, passed the Malay Archipelago and finally reached Melanesia, Micronesia, and Polynesia. To this hypothetical people BROWN ascribes the megalithic monuments of these regions.

KRUYT makes the following remark referring to BROWN's theory: "Zijn bewijsvoering richt zich uitsluitend op Polynesië en in het bijzonder op Nieuw Zeeland, maar ons is alleen voldoende te weten, dat volgens hem de Kaukasiërs over den Indischen Archipel zijn getrokken. Is dit werkelijk het geval geweest, dan vinden wij in de oudheden van

Napoe, Besoa en Bada hoogstwaarschijnlijk overblijfselen uit den tijd der Kaukasiers."

MACMILLAN BROWN in a paper of 1911, "Migrations of the Polynesians," still holds the view of the stone sculptures having been produced by a Caucasian people wandering towards the east.

GRUBAUER in his work of 1913 does not express himself regarding the origin of the monoliths, but simply calls them riddles.

Perry in his work in 1918 presents a theory according to which all the stone objects in the Dutch East Indies, in the Philippines, in Annam, etc. are the work of one people who wandered about searching for gold and pearls. This strange hypothetical people, says Perry, must have known the arts of constructing terraced paddy fields with irrigation, of carving in stone, of washing gold and of working in metals. They must have taken with them buffaloes as domestic animals. Furthermore he contends that they taught the aborigines with whom they intermarried, their sun worshipping, their belief in a life after death, and their use of phallic symbols, as well as the concept of nobility and many other things.

The conditions in the sections of Central Celebes where the stone objects are found give very little support for this fantastic theory, as I have already pointed out in 1921.

In 1921 the present author also made a study of the origin of these stone objects and found, as has already been mentioned, that they probably belong to a cultural period before that during which the buffalo was brought to Celebes and the natives learned to cultivate paddy on artificially irrigated land. The present author there further pointed out that one cannot be certain that all the stone objects in question, especially the stone mortars, belong to one and the same period. The author concluded his survey of these stones with the point that the knowledge about them is too limited to allow of any broad generalisations.

In the extensive work "Illustrierte Völkerkunde," published by G. BUSCHAN in 1923, HEINE-GELDERN, in the chapter entitled "Southeast Asia," states his belief in a relationship between the appearance of menhirs and the keeping of larger types of horned animals such as the gayal and the buffalo. As evidence of this he points out among other things that these menhirs in Celebes were used for binding the buffaloes who were to be slaughtered.

However, one is still not sure but what these menhirs possibly, at least in Celebes, antedate the domestication of the buffalo. Because people in modern times have used these menhirs at places to tie the buffaloes does not in itself prove anything about their original use. In Kantewoe for instance there was in 1918 a fine menhir in a little open square immediately in front of the temple, but according to the reluctantly given information I was able to extract from the natives, it had been used as a torture pole for human beings who were sacrificed on the more important occasions.

It is thus not impossible that from the beginning these menhirs have had some connection with sacrifice, first of human beings and in more recent times of buffaloes.

It is not, however, entirely out of the question that, both kinds of sacrifice were matters of secondary importance and that these menhirs, whether they were standing alone, were placed in a circle or in parallel rows, had served some entirely different purpose.

In 1928 HEINE-GELDERN again made a study of the megalithic finds in Celebes in connection with the megalithic finds in Indonesia and compared them with similar remains of cultures in Europe, North Africa, Asia Minor, India, Southeast Asia, and Oceania. He found so many points of similarity that he felt justified in seeing a common prehistoric culture in these widely scattered regions. He includes in this culture even ordinary oxen and buffaloes as domesticated animals, and much which relates to them, such as the

sacrificial use of the buffalo in connection with agricultural rites and the ceremonies having to do with death, as well as the horn shaped gable decoration on the houses and the "horn hats" worn by the men in battle, and the sacrificial poles of wood with horn-shaped or forked top, etc.

HEINE-GELDERN is undoubtedly right when he points out that there are great similarities in the stone monuments all the way from northwestern Europe, the Mediterranean countries, British and Further India, Indonesia, Melanesia, Micronesia, etc. to the most easterly part of the South Seas. But to what extent all these objects should be included under one special period, and whether such a period embraces perhaps many thousands of years during which time changes may have taken place in the objects, we still know very little. One only needs to recall that the megalithic period of Sweden covers certainly a span of several thousand years.

In view of these facts I consider it exceedingly questionable to place together under a single culture the megalithic finds and the buffalo, with all kinds of religious customs and ceremonies relating to the latter. It is of course true that there are found on a number of menhirs in Further India, sculptured buffalo horns, but this does not prove that these stones are of the same age, and have been made for the same purpose, as, for example, the menhirs of Celebes. As a matter of fact the megalithic culture has extended to sections where man has never domesticated the buffalo or any other horned animal, for instance in the whole of Oceania.

In his work on the stone monuments in Central Celebes in 1926 RAVEN tries to show certain likenesses between the statues on Easter Island and those of Celebes, and between a certain kind of tattooing among the population of Easter Island and the bow-shaped lines found on the chests of some of the Celebean statues.

In 1931 VATTER treated the megalithic culture in Indonesia, basing his work on his researches among the

Ngada people of Flores. Here his ideas entirely line up with the theories expressed by HEINE-GELDERN in 1928.

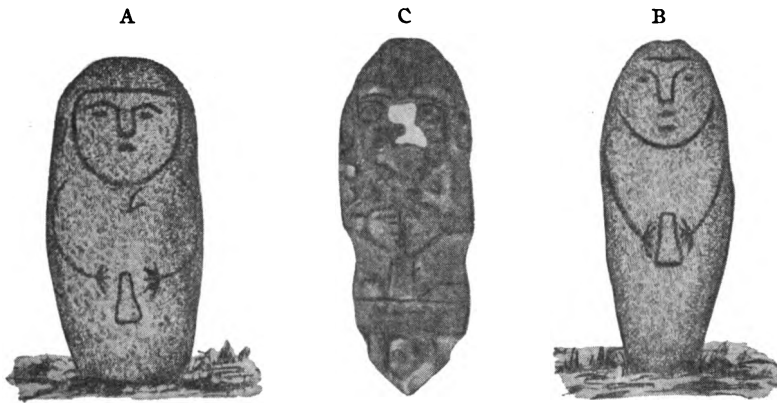
The following year, 1932, KRUYT in his already quoted paper, reached a most remarkable conclusion. He apparently was not acquainted with the works of the above mentioned authors, or else he simply neglects to mention them, and is, evidently, still loth to combine the megalithic finds with an immigration of people from the north, presumably from Japan.

Further discussion of KRUYT's theories I feel is quite unnecessary as I have in the first place already pointed out in the above a number of weaknesses in his evidence for these theories, and in the second place I feel that HEINE-GELDERN has proved sufficiently clearly that one must investigate the origin of the megalithic culture from quite another angle, without my repeating this point.

In passing, one might also mention KORNERUP's work of 1935, "Mensch und Landschaft auf Celebes," in which he says a few words about the megalithic finds in Central Celebes; however, since he only corroborates KRUYT's ideas of 1932, and quotes only this author in the matter of these stones, ignoring all the other researchers, his work has very little scientific value.

In conclusion we might say regarding the age and origin of the megalithic culture in Central Celebes the following. It has many characteristics in common with similar finds all the way from northwestern Europe down to Easter Island in the South Seas. I need mention only the tremendously wide-spread distribution of the stone mortars, the appearance of the dolmens and perhaps also the distribution of the monolithic statues. To the west there are in several places monolithic statues resembling those in Central Celebes. J. G. ANDERSSON in "Der Weg über die Steppen," in 1929, pointed out that similar statues, so-called b a b a statues appear even from the Elbe region in the west, on through Central Europe, Southern Russia,

through Turkestan, on to China. ANDERSSON reproduces from HEIKEL several *b a b a* statues and in spite of the fact that the reproductions are not much more than diagrams it seems to me that they show very strikingly the similarity between these *b a b a* statues and the images in Central Celebes. The only parts shown in the *b a b a* statues are the face and the arms, and between the latter, a goblet-shaped object. About this ANDERSSON writes: "Diese letztere

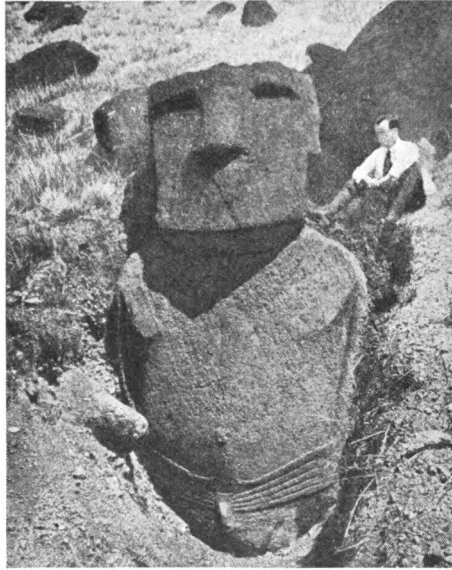


After J. G. ANDERSSON

Fig. 73 — A and B, so-called *Baba* statues, life size stone images from the Talas Valley in Russian Turkestan; C, miniature *Baba* of bronze.

ist von höchstem Interesse, da sie auffallend den sogenannten *Baba*-skulpturen ähnelt, freistehenden Menschendarstellungen in Stein, oft in mehr als natürlicher Grösse, die vereinzelt oder in kleinen Gruppen stehen, vom Schwarzen Meer bis zur Südmongolei hin, Kennzeichnend für diese *Baba*-statuten ist vor allem, dass die Hände einen zylinderförmigen Gegenstand über der Gürtelrand halten, und dieser Zug ist schön ausgebildet sowohl an unserem bronzenen Miniaturbaba wie an den zwei Steinbabas von dem Tale des Talas im russischen Turkestan, die wir hier nach HEIKEL wiedergeben." (fig. 73)

ANDERSSON writes further about these statues: "Die Babas sind in gewissem Sinne ein ungeklärtes Problem. . . . WILHELM van RUBRUK berichtet von seiner Reise im dreizehnten Jahrhundert, dass ein südrussisches Turkvolk, die Commanen, noch seiner Zeit Statuten dieser Art zu errichten pflegten."



After ROUTLEDGE

Fig. 74 — Stone image. Easter Island.

The goblet-shaped object illustrated by ANDERSSON seems to me quite naturally to represent the male sex organ, especially when one compares it with a number of statues representing men, in Central Celebes. This goblet-shaped object is, especially in the picture to the left, divided into two parts, an upper, narrower one, and a lower, broader part, the former evidently representing the penis and the latter the scrotum (see figs. 51 and 73).

Again turning our attention to Easter Island we observe

that there, too, are found statues which to a great extent remind us of the monoliths in Central Celebes (fig. 74).

Cylindrical stone vats which are almost completely like the *k a l a m b a* in Central Celebes appear west of Celebes. Professor van EERDE has, for example, reproduced a large



After van EERDE

Fig. 75 — Stone vat. Toba, N. Sumatra.

cylindrical stone vat with a cover, from northern Sumatra, which strongly resembles a *k a l a m b a* with a stone cover. Practically the only dissimilarity is the human figure on the cover (fig. 75).

Also in Annam there exist a number of round stone vats, without covers, which look like *k a l a m b a* (fig. 76). About this picture, which is taken from the work "Indochine,"

written by E. A. SARRAUT in 1930, the author says only the following: "Sur les Herbeux du Tranninh, entre les deltas de l'Annam et la vallée du Mekong, sont groupées de grands jarres taillées dans la pierre. Ces monuments, dont la destination reste énigmatique, remontent vraisemblablement à l'époque néolithique."

Regarding additional stones and the few carvings on them, I have found in the literature on the subject ex-



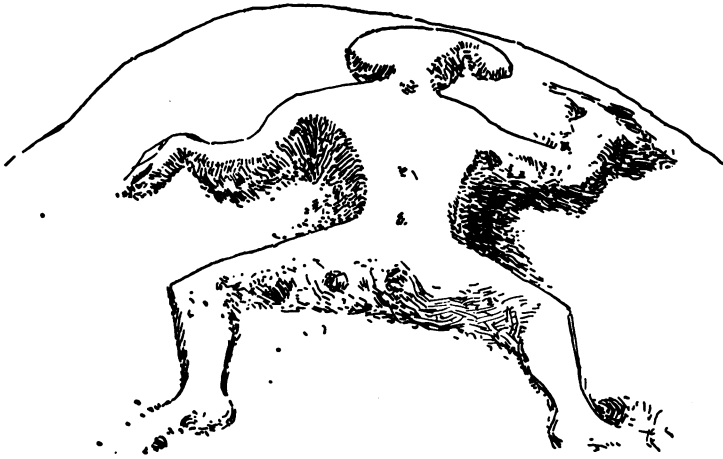
After SARRAUT

Fig. 76 — Stone vats on the grassy plain between the delta of the Annam and the Mekong Valley, Indo-China.

ceedingly little information about similar things in other places which could give any suggestion of relationship. As to the human figure on one of the Jaentoe stones, reproduced by KRUYT, it is evidently a highly conventionalized form, and shows perhaps a certain similarity to a human figure carved out in relief on a stone in Sarawak, North Borneo (fig. 77). LING ROTH in 1896 writes about this stone, on page 280, Vol. II, of "The Natives of Sarawak and British North Borneo:" "A figure on sandstone rock a little under life size. It is situated at the foot of the mountain of

Santubong near a little stream. It was discovered by a Malay fisherman in clearing a spot of ground for his garden." LING ROTH does not express himself in regard to the age of this piece of sculpture but merely places it under the heading "Archaeology," thus assigning it to a culture period which existed some time previous to the present.

All attempts to fix definitely in time these megalithic finds, or to arrange them in any sort of chronological order,



After LING ROTH

Fig. 77 — A figure on sandstone rock a little under life size, at the foot of the mountain of Santubong, Sarawak, North Borneo.

seem to me to be entirely useless in view of the very limited knowledge we have regarding them.

As final conclusion about our research on the megalithic finds in Central Celebes, it would seem that we can still say today what I said in 1921, i. e.: "For the present, to draw any far-reaching conclusions about the origin of the strange stone objects is not advisable. Only a very careful archaeological investigation of the hill districts, and an anthropological investigation of the surely anything but homogeneous population of these regions, could perhaps lift a corner of the veil which completely covers this chapter of history."

List of Literature.

- ANDERSSON, J. G. *Der Weg über die Steppen*, in The Museum of Far Eastern Antiquities, Stockholm. Bulletin No. 1. Stockholm 1929.
- ADRIANI and KRUYT, ALB. C. *Van Posso naar Parigi, Sigi en Lindoe*, in Mededeel. van Wege het Nederl. Zendeling-Genootschap. Jaarg. XLII, Rotterdam 1898.
- — *De Bare'e-sprekende Toradja's van Midden-Celebes*. Eerste Deel, Batavia 1912.
- BROWN, MACMILLAN, *Maori and Polynesian, their Origin, History and Culture*. London 1907.
- — *Migrations of the Polynesians*. Trans. and Proc. New Zealand Inst. 1911.
- EERDE, J. C. VAN, *De Volken van Nederlandsch Indië*. Vol. I. Amsterdam 1920.
- HEINE-GELDERN, R. *Südostasien*, in Illustrierte Völkerkunde, II, Erster Teil. Stuttgart 1923.
- — *Die Megalithen Südasiens und ihre Bedeutung für die Klärung der Megalithenfrage in Europa und Polynesien*, in Anthropos XXIII, 1928, p. 276—315.
- GRUBAUER, A. *Unter Kopffägern in Central-Celebes*. Leipzig 1913.
- KATE, P. TEN, *De weg van Bada naar Napoe*, in Mededeel. van wege het Nederl. Zendeling-Genootschap. Jaarg. LIV. Rotterdam 1910.
- KAUDERN, W. *I Celebes Obygder*. Vols I, II. Stockholm 1921.
- — *Ethnographical Studies in Celebes*. Vol. I: *Structures and Settlements in Central Celebes*. Göteborg 1925.

- KILIAAN, J. TH. E. *Oudheden aangetroffen in het landschap Besoa, Midden-Celebes*, in Tijdschr. Voor Indische Taal-, Land- en Volkenkunde, uitgeg. door het Bat. Gen. van Kunsten en Wetenschappen. Vol. L. Batavia 1908.
- KORNRUMPF, M. *Mensch und Landschaft auf Celebes*. Beiheft 8 zur Geographischen Wochenschrift. Breslau 1935.
- KRUYT, ALB. C. *Nadere gegevens betreffende de oudheden aangetroffen in het Landschap Besoa (Midden-Celebes)* in Tijdschrift voor Indische Taal-, Land- en Volkenkunde. Vol. L. Batavia 1908.
- — *De berglandschappen Napoe en Besoa in Midden-Celebes XI. De oudheden van Besoa en Napoe*, in Tijdschrift K. Nederl. Aardrijksk. Genootschap. Leiden 1908.
- — *Het landschap Bada in Midden-Celebes*, in Tijdschr. K. Nederl. Aardrijksk. Genootschap, 2:e Serie, Vol. XXVI. Leiden 1909.
- — *De steen Watoe taoe in de Jaentoe-vlakte*, in Notulen van de Algemeene en Directievergaderingen van het Bat. Gen. van Kunsten en Wetenschappen. Deel LII, Bijlage II, p. 90. Batavia 1915.
- — *L'immigration Préhistorique dans les Pays des Toradjas Occidentaux*. Extrait de l'hommage du service archéologique des Indes Néerlandaises au premier congrès de préhistoriens d'Extrême-Orient à Hanoi 1932, p. 1—15. Batavia 1932.
- PERRY, W. J. *The Megalithic culture in Indonesia*, in Manchester Univ. Press 1918 (= Publications of the Univ. of Manchester No. CXVIII).
- RATZEL, FRIEDRICH, *Völkerkunde*. Band II. Leipzig 1887.
- RAVEN, H. C. *The Stone Images and Vats of Central Celebes*, in Natural History No. 3. New York 1926.
- ROUTLEDGE, Mrs. SCORESBY, *The Mystery of Easter Island*. London 1919.

- SARASIN, P. und R. *Reisen in Celebes*. Band I, II. Wiesbaden 1905.
- SARRAUT, ALBERT, *Indochine*. Images du Monde. Paris 1930.
- SCHUYT, P. *Van dag tot dag op een reis naar de landschappen Napoe, Besoa en Bada*, in Mededeel. van wege het Nederl. Zendeling-Genootschap. Jaarg. LV. Rotterdam 1911.
- VATTER, ERNST. *Die Ngada. Ein Megalith-Volk auf Flores (Niederländisch-Indien)*. Mit 6 Aufnahmen des Verfassers auf Tafelseiten 83—35, in Der Erdball, Jahrg. 5, 9. Heft. 1931. P. 347—351. Berlin-Lichterfelde.

